

ORDINANCES AND REGULATIONS RELATED TO THE B.ED. EXAMINATION

O.320. The objective and the Learning outcomes of the B.Ed. course are :

Objectives :

- (a) To help future prospective teacher to develop competence to teach subjects of their specialisation, on the basis of an adequate theory of learning and a sound knowledge of the subjects.
- (b) To develop interest, attitudes and knowledge which will enable them :
 - (i) to foster the all round growth and development of children under their care and
 - (ii) to provide guidance to individual pupil.
- (c) To develop an understanding of the aims and objective of education in the Indian background and to promote an awareness of the role of the school and the teacher in realising these aims and ideals.
- (d) To develop an understanding of the close relationship between society and the school, between life and school, between life and school work.
- (e) To build up a professional consciousness.

Learning Outcomes :

1. Competence to teach effectively ^{to} two school at the Secondary level.
2. Ability to translate objectives of Secondary Education in terms of specific programmes and activities in relation to the curriculum.
3. Ability to understand children's needs, motives, growth pattern and the process of learning to stimulate learning and creative thinking to foster growth and development.
4. Ability to use
 - (a) Individualised instruction and
 - (b) Dynamic methods in large classes.
5. Ability to examine pupil's progress and effectiveness of their own teaching through the use of proper evaluation techniques.
6. Equipment for diagnosing pupil's difficulties and deficiencies in achievement and dealing with them through remedial work.
7. Readiness to spot talented and gifted children and capacity to meet their needs.
8. Ability to organise various school programmes, activities for pupils.

9. Developing guidance point of view in educational, personal vocational matters.
10. Ability to assess the all-round development of pupils and to maintain a cumulative record.
11. Developing certain practical skills such as :
 - (a) Black board work
 - (b) Preparing improvised apparatus.
 - (c) Preparing teaching aids.
12. Interest and competence in the development of the teaching profession and of education. Readiness to participate in activities of professional organisations.

O.321. The objectives of the Practical work prescribed for the B.Ed. course are follows :

PART-II : PRACTICAL WORK

Objectives :

To develop the ability and self-confidence of pupil teachers :

1. Be conscious of sense of values and need for their inculcation in children through all available means including one's own personal life.
2. Possess a high sense of professional responsibility.
3. Develop resourcefulness so as to make the best use of the situation available.
4. Appreciate and respect each child's individuality and treat him as in independent and integrated personality.
5. Arouse the curiosity and interest of the pupils and secure their active participation in the educative process.
6. Develop in the pupils capacity for thinking and working independently and guide the pupils to that end.
7. Organise and manage the class for teaching learning.
8. Appreciate the dynamic nature of the class situation and teaching techniques.
9. Define objectives of particular lessons and plan for their achievement.
10. Organise the prescribed subject-matter in relation to the needs, interests and abilities of the pupils.
11. Use appropriate teaching methods and techniques.
12. Prepare and use appropriate teaching aids, use of the black-board and other apparatus and material properly.
13. Convey ideas in clear and concise language and in a logical manner for effective learning.
14. Undertake action research.

15. Give proper opportunity to the gifted pupils and take proper care of the back-ward pupils.
16. Co-relate knowledge of the subject being taught with other subjects and with real life situations as and when possible
17. Prepare and use assignments.
18. Evaluate pupil's progress.
19. Plan and organise co-curricular activities and participate in them.
20. Co-operate with the school teachers and administrators and learn to maintain school records and registers.

Practical skill in teaching the two subjects offered under Theory Papers V & VI and the following :

1. Observation of lessons delivered by experienced teachers and staff of the college.
2. Planning units and lessons.
3. Discussion of lesson plans, Unit Plans and Lessons given (including criticism lessons).
4. Organisation and participation in co-curricular activities
5. Setting follow up assignment.
6. Evaluation in terms of educational objectives use of teachers made tests. Administration of standardized tests.
7. Black-board work.
8. Practical work connected with school subjects.
9. Preparation and use of audio visual aids related to methods of teaching.
10. Experimental and laboratory work in Sciences, Home-Science, Geography and other subjects of experimental and practical nature.
11. Study of the organisation of work and activities in the school.
12. Observation and assistance in the Health Education programme.
13. Observation and assistance in the Guidance programme.
14. Maintenance of cumulative records.
15. Techniques of teaching large classes.

O.322. A candidate who after taking a Bachelor's/ Shastri Degree of the University or any other University recognised for the purpose by the syndicate, with two teaching subjects (as defined in Note No. 1 below) has completed a regular course of study in college, affiliated to the University for one academic year and has during the course of the year delivered at least 40 lessons in a recognized school under the supervision of the staff of the college shall be eligible for admission to the examination for the degree of Bachelor of Education.

Notes :

- (i) Teaching subject means a subject offered by the candidate at his Bachelor's/ Shastri or Master's Degree Examination either as a compulsory subject or as an optional subject or as a subsidiary subject provided that the candidate studied it for at least two years and also took University Examination each year but shall not include such subjects as were studied by him only for a part of the Bachelor's Degree Course. Thus the qualifying subjects like General English, General Hindi, General Education, History of Indian Civilization and Culture, Elementary Mathematics etc. Prescribed for the First year T.D.C. course of the University of a subject dropped by candidates at the part I stage of the degree course shall not be treated as teaching subjects. In case the honours graduates, besides the Honours subject the subsidiary subject would also be taken into account provided the candidate studies the same for at least two academic sessions and also took University Examination each year.
- (ii) Only such candidate shall be allowed to offer Social Studies for the B.Ed. Examination as have taken their Bachelor's Degree with any two subjects out of History, Political Science, Public Administration, Economics, Geography, Sociology, Philosophy and Psychology.
- (iii) A person having Bachelor's Degree in Agriculture will be allowed to offer General Science and Biology for the B.Ed. Examination. General Science may also be allowed to be offered by a candidate possessing the degree of B.Sc. (home Science) or passing the B.Sc. Examination with (i) Chemistry and (ii) Any one subject of life Science, i.e. Biology or Botany or Zoology.
- (iv) A candidate who has offered Political Science or Public Administration at his Bachelor's or the Master's Degree Examination shall be deemed eligible to offer Civics as a teaching subject in the B.Ed. Examination.
- (v) The additional optional subject of Bachelors Degree Examination in which a candidate passes in one year with all the papers prescribed for the Three Year course after obtaining the Bachelor's Degree may also be treated as a "Teaching subject". Further, if a candidate desires to pass the additional optional subject after obtaining the Bachelor's Degree to be taken into consideration for permitting him to offer the subject, under paper V and VI for the B.Ed. course, the marks obtained by him in the additional optional subject may also be taken into account in

addition to the marks obtained by him at the Bachelor's Degree for determining his eligibility for admission to B.Ed. Course

- (vi) A student teacher of B.Ed. course should have no difficulty in offering his or her teaching subject according to a subject offered by the candidate at his Bachelor's/ Shastri or Master Degree Examination. A Student teacher can offer it irrespective of Faculty consideration in this regard. He or she can offer any two subjects and his teaching subjects from Group under Regulation-42 of the syllabus of B.Ed. of the University of Rajasthan Jaipur.

O.323. No. candidate shall be allowed to appear in the B.Ed Examination unless he/she has attended 66% of the periods devoted to Physical Training, Games and Sports/Dance or similar-other activities.

O.324. The Examination for Degree of Bachelor of Education shall be in two parts-Pt. I comprising Theory papers and part II Practice of Teaching in accordance with the scheme of examination laid down from time to time. A candidate may in addition offer a special course in any one of the specialisations prescribed under the scheme of examination from time to time, and if successful as mentioned to this effect will be made in the Degree awarded to him.

O.325. Candidates who fail in B.Ed. examination in the Theory of Education may present themselves for re-examination therein at a subsequent examination without attending a further course at an affiliated Training College.

Provided that a candidate who fails in any one of the theory papers and secures at least 48% marks in the aggregate of the remaining theory papers may be allowed to reappear in the examination in the immediately following year in the paper in which he fails only. He shall be declared to have passed if he secures minimum pass marks prescribed for the paper in which he appeared and shall be deemed to have secured minimum pass marks only prescribed for the paper (irrespective of the marks actually obtained by him) for the purpose of determining his division in accordance with the scheme of examination. The candidate shall have to repeat the whole examination in subsequent year in case he fails to clear the paper in which he failed.

O.326. Candidates who fail in the B.Ed. Examination only in the practice of teaching may appear in the practical examination in the subsequent year provided that they keep regular terms

for four calendar months and give atleast 40 supervised lessons.

O.326 A : A candidate who completes a regular course of study in accordance with the provision laid down in the Ordinances, at an affiliated Teacher's Training College for one academic year but for good reasons fails to appear at the B.Ed. Examination may be admitted to a subsequent examination as an ex-student as defined in O. 325 or 326 above.

O.326 B : No candidate shall be permitted to appear as an ex-student at more than two subsequent examinations.

O.326 C : A candidate who passed B.Ed. Examination of this University of the B.Ed. or L.T. Examination of another University recognized by the Syndicate may be permitted to take a special course in a subject if he did not offer a special subject in the year which he passed the examination or in case he passed with a special, other than the one offered by him for the examination provided that in each case:

(a) he studies at a college of Education affiliated for the purpose to the University for atleast three months; and

(b) he completes the theoretical and practical work as laid down in the courses of study for paper VI.

For a pass in the special subject, a candidate shall have to obtain atleast second class marks in the practical examination.

O.326 D : A candidate who has already passed B.Ed. examination of the University or the B.Ed. or L.T. examination of some other University recognised for the purpose by the Syndicate may be permitted to take any one paper of Content cum Methodology of and other teaching subject which he had not offered at his B.Ed./L.T. Examination provided that :

(a) He is eligible to offer that teaching subject under provisions of O. 322.

(b) He studies at a college of education affiliated to the University for the purpose for atleast three months, and

(c) He completes the theoretical and practical work as laid down in the scheme of examination for that paper from time to time and also delivers atleast 20 lessons in a recognised school under the supervision of the staff of the college.

Regulation-42

SCHEME OF B.ED. EXAMINATION

The B.Ed. programme will consist of the following components :

- Part I Main theory paper I to VI.
- Part II Teaching Practice and Practical Work
- Part III Qualifying Compulsory Paper VII (Computer)
- Part IV Specialisation (Additional optional paper VIII)

There will be six theory papers of three hours duration carrying 100 marks each for final Examination.

Compulsory Papers-I to IV

Optional Paper-V & VI

Compulsory

Paper-I Education and Emerging Indian society.

Paper-II Psycho-Social Basis of Learning and Teaching.

Paper-III Educational management and school organisation.

Paper-IV Educational Technology and classroom Management.

Optional

Paper V and VI-Contents cum-Methodology Teaching Learning—

Under Paper V and VI candidate shall be required to offer any two papers from the following :

Hindi	(Pg. No. 26)	Sanskrit	(Pg. No. 28)
English	(Pg. No. 32)	Social Studies	(Pg. No. 39)
History	(Pg. No. 43)	Civics	(Pg. No. 41)
Geography	(Pg. No. 47)	Mathematics	(Pg. No. 64)
Physics	(Pg. No. 62)	Biology	(Pg. No. 59)
Chemistry	(Pg. No. 56)	General Science	(Pg. No. 54)
Home-Science	(Pg. No. 52)	Arts	(Pg. No. 81)
Economics	(Pg. No. 45)	Urdu	(Pg. No. 37)
Commerce- Teaching	(Pg. No. 50)	Music	(Pg. No. 81)
Book Keeping- Accountancy	(Pg. No. 49)		

Qualifying Compulsory Paper : Paper VII Computer (Pg. No. 67)

Paper VIII Specialisation (Additional optional)

1. Environmental Education (Pg. No. 73)
2. Population Education (Pg. No. 75)
3. Physical Education (Pg. No. 79)
4. School Library organisation (Pg. No. 70)
5. Educational and Vocational guidance (Pg. No. 69)
6. Measurement and Evaluation (Pg. No. 72)
7. Elementary Education (Pg. No. 76)

Graduates in Arts, Science, Commerce Streams shall have to

offer any two teaching subjects studied at Graduate Level at least for two years for paper V and VI.

Evaluation papers I to VI

Each theory paper will carry 100 marks out of which 80 marks will be of theory paper at the final examination and 20 marks to be internally assessed. Out of the 20 marks 10 marks shall be for assessing the sessional work and 10 marks for the mid-term test.

III. Question Papers :

1. Each question paper (in papers I to VI) will have two sections. Section 'A' will contain 12 short answer type questions, out of which a candidate will be required to attempt 7 questions each carrying 5 marks. Section 'B' will contain three essay type questions with an internal choice for each question. Essay type questions will carry 15 marks.
2. Short answer type questions should aim at testing knowledge of concepts, facts, definitions, laws, principles and generalizations etc. and also testing of understanding of principles and concepts etc. The answer to such questions should not exceed a page for each question.
3. Essay type questions are to aim at testing abilities of critical thinking and application of principles etc. taught in theory.
4. The syllabus of content part in papers V & VI shall be the same as prescribed in the relevant teaching subject (optional wherever provided) for the Senior Secondary Examination of the Board of Secondary education, Rajasthan, Ajmer from time to time.
5. No direct question will be set in this content part but it will be evaluated along with methodology prescribed in the syllabus i.e., the questions set on this part will be based on the application of methodology.
6. (i) Each questions paper set on subjects included under Paper V and VI will have two sections. Section 'A' will contain 12 short answer type question of 5 marks each. Section 'B' will contain 3 essay type questions with an internal choice for each question and each essay type question will carry 15 marks.
(ii) Section 'A' will further have section A_1 and A_2 . Section A_1 will have 5 questions related with the content based methodology and section A_2 will have 5 questions related directly with methodology. Candidates will be required to attempt 4 questions from section A_1 and 3 question from section A_2 of these parts of Section A.

7. The first of the three questions set in Section 'B' in papers included under paper V to VI will be on content based methodology. The internal choice given in this question will be also of the same nature i.e. content base methodology (application of the methodology in content area).

PART II

IV. Teaching practice and Practical Work

The Teaching Practice will carry 300 marks comprising of :

- | | |
|-------------------------|-----------|
| 1. Internal assessment | 150 marks |
| 2. External examination | 150 marks |

Board of Examiners for Teaching Practice As far as practicable each candidates will be examined by atleast one examiner of his stream. Board will consist of Two external examiners and Principal or his nominee. The name of Internal examiner may be proposed by Principal.

Internal—The distribution of 150 marks of Internal assessment shall be as follows :

Internal Assessment Scheme

S.No.	Activities	Marks Distribution
1	Micro Teaching (5 skills) (Each skill of 2 marks)	10
2	Regular Practice Teaching including unit Test (each subject of 25 marks)	50
3	Criticism Lesson (Each subject of 10 Marks)	20
4	Observation	05
	I. Criticism lesson	
	II. Demonstration	
	III. Ordinary lesson	
5	Teaching aids	05
	(For Arts Student-four in each method subject)	
	(For Science Student-two teaching aids and practical in each method subject)	
6	Practical in the Audio Visual equipments-two (to be evaluated by Audio Visual in charge)	05
7	Open air session / SUPW camp and community service	20
	1. Beautifications and Shramdan	
	2. Community Participation	
	3. Studies (work experience related with some theory course)	
	4. Cultural and literary activities and games	
8	Internship (Block Practice teaching)	

1. Teaching of Method subject ($15 \times 1 = 15$)	15
2. Social participation in group	5
3. Participation in all activities of school	10
4. Report of any feature of school/Case study/ Action Research	05
Grand Total	150

V. Organisation Evaluation of Practice Teaching :

1. Every candidate will teach atleast 40 lesson (20 lesson in each subject) during Practice teaching session. At least ten lesson in each subject should be supervised.
2. 40 lessons as desired in the syllabus should be completed as full period class room lesson. Micro teaching lesson be used in addition to those 40 lessons for developing certain teaching skills.
3. A minimum of ten lessons in each subject will be supervised evaluated by the subject specialist or a team of specialists of the subjects.
4. By and large, the evaluation of the performance in the practical teaching will be based on the last ten lessons in the subject when the student has acquired some competence and skills of teaching.
5. The internal assessment in practice of teaching will be finalized by the principal with the help of the members of the teaching staff and the same will be communicated to the University before the commencement of the practical each year.
6. Each candidate should be prepared to teach two lessons (one in each subject) at the final practical examination. The external examiners may pickup atleast 10% of the candidates to deliver two lessons.
7. There will be a Board of Examiners for the external examination for each college which will examine each candidate in atleast one lesson and a minimum of 15% in two lessons (one in each of the two subjects).
8. The Board of Examination will Consist of :
 - (a) The principal of the college concerned.
 - (b) A principal or a senior and experienced member of the teaching staff of another training college, affiliated to Rajasthan University.
 - (c) An external examiner from outside the University of Rajasthan or a senior member of the teaching staff of an affiliated training college.

(d) The Board as far as possible will represent Humanities Languages and science.

9. Approximately 40 lessons will be examined by the Board each day.

VI. Working out the result and awarding the division :

- (i) A candidate in order to be declared successful at the B Ed Examination shall be required to pass separately in Part I (Theory) and Part II (Practice of Teaching).
- (ii) For a pass in Part I (Theory) a candidate shall be required to obtain atleast (a) 30 percent marks in each theory paper and sessionals (24 marks out of 80 and 6 marks out of 20). (b) 36 percent marks in the aggregate of all the theory papers
- (iii) For a pass in Part II (Practice of Teaching) a candidate shall be required to obtain separately at least—
 - (a) 40 percent marks in the external examination
 - (b) 40 percent marks in internal assessment.
- (iv) The successful candidates will be classified in three divisions and shall be assigned separately in theory and Practice of Teaching as follows :

Division	Theory	Practice of Teaching
I	60%	60%
II	48%	48%
Pass	36%	40%
Computer Prac.	36%	40%

VII Part III Qualifying Compulsory Paper-VII

Computer Literacy And Educational Applications

- (a) Each candidate is required to qualify this paper for obtaining the degree. However the marks obtained in this paper will not be included to determine the overall division
- (b) This paper will consist of 100 marks (50 marks for Theory paper and 50 marks for Practical) practical examination will be taken by a board of examiners consisting of one external and one internal examiner.
- (c) In order to be declared successful in this paper candidate must obtain a minimum of 30% marks separately in Theory and Practical and 36% in aggregate.

Evaluation

1	Theory paper of	50 Marks
2	Practical Evaluation	50 Marks
	(a) Practical Examination	20 Marks
	(b) Submission of Report	20 Marks

(c) Viva

10 Marks

Total

50 Marks

VIII Part IV Specialisation Additional Optional Paper-VIII

1. Candidates may offer anyone of programme mentioned under paper VIII. Each will consist of 100 marks out of which 80 marks will be of Theory Paper at the Final Examination and 20 marks to be internally assessed out of 20 marks, 10 marks shall be for assessing the sessional work and 10 marks for the mid term test.
2. Marks obtained in this paper will not be included to determine the overall division but if successful, a mention will be made to the effect in the degree conferred.
3. The examination paper will comprise of questions based on the theoretical as well as practical work prescribed for the paper.
4. (i) Questions paper set on subjects included under Paper VIII will have two sections. Section 'A' will contain **12 short answer type question** of 5 marks each. Section 'B' will contain 3 easy type questions with an internal choice for each question and each essay type question will carry 15 marks.
(ii) Candidates will be required to attempt only 7 questions out of 12 questions from Section-A and three questions from section B which have internal choice.
5. The practical work record shall be properly maintained by the college and may be made available for satisfaction of external examiners in practice teaching who are expected to submit a report regarding this separately.
6. In order to be declared successful in the Additional Special Programmes, the candidates must obtain a minimum of 50 marks in this paper.

Paper VIII. Special Papers :

Any one of following may be offered :

1. Environmental Education
2. Population Education
3. Physical Education
4. School Library Organisation
5. Educational and Vocational guidance
6. Measurement and Evaluation
7. Elementary Education.

Paper-I : Education and Emerging Indian Society

Objective

To enable the Student teacher to understand :

1. The relationship between philosophy and education, how different philosophical system have influenced the education
2. The Context in which various educational approaches have evolved in India
3. The Provisions regarding education in the Indian constitution
4. The need to study education in a **sociological** perspective. The Process of social change influencing the education and the role of education in social change.
5. The role and commitment of the teachers and learners about the challenges faced in evolving new education order
6. Role of education in changing Indian Society towards a new social order.

Course Content

Unit 1 :

1. Concept, nature and Meaning, aims and objectives of education
2. Forms of Education-Formal, Informal, Non-formal
3. Values and aspirations of the present Indian Society
4. Cultural heritage and its relevance in the modern Indian education

Unit 2 :

Educational implications of the following :

1. Idealism
2. Naturalism
3. Pragmatism

Educational contribution of the following :

1. Jainism
2. Geeta
3. Buddhism
4. Ravindra Nath Tagore
5. M.K. Gandhi
6. Swami Vivekanand
7. Sri Aurobindo Ghosh

Unit-3 : Indian Constitution and the status of education with reference to the following :

1. Universalisation of education
2. Equality of opportunities in education.
3. Education and Fundamental Rights and Duties
4. Relationship between education and democracy

5. Role of education in developing Socialistic patterns and national integration.

Unit 4 :

Education as a sub System

Education as an agent of social change, social change influencing the trend of education and Social disparities.

Social Mobility, Cultural Lag, Gender disparities

Regional disparities.

The role of educational institution for creating new social orders.

Unit 5 :

Emerging Indian Concerns and their educational implication.

Population education.

Ecological imbalance.

Globalisation.

Human rights

Technological invasion.

Sessional Work

(20 Marks)

(1) One test of 10 marks

(2) An essay of 10 marks on any one of the following :

1. Role of teacher to prepare students for responsible citizenship.
2. Inculcation of values in the present system of education.
3. Education opportunities
4. Educational opportunities
5. Universalization of Education
6. Education and Culture

References

❖ Anand, C.L. Etal : The Teacher and Education in Emerging Indian Society (New Delhi, NCERT, 1983)

❖ Dewey, John : Democracy and Education, New York.

❖ Home, H.H. : Democratic Philosophy of education, MacMillan, New York.

Qad ❖ Qad L.K. : शिक्षा की दार्शनिक एवं समाजशास्त्रीय भूमिका—सई दिल्ली मेकमिलन)

❖ Raymont : Principles of Education Longmans Green London.

❖ Philosophical : Basis of Education Longmans Green London.

❖ Pandey and Rajni : शिक्षा तथा भारतीय समाज

❖ Report of the University Education commission, 1948

❖ Report of the Education Commission, Kothan Commission

❖ Saiydain K.G. : Problems of Educational Reconstruction in India, Bombay, Asia Publishing House.

- ❖ Shrimali K.L. Education in changing India Bombay Asia Publishing House
- ❖ Teneja V.R. Educational Thought and Practice Sterling Publication, New Delhi, 1973
- ❖ Verma and Uppadhaya : शिक्षा के दार्शनिक एवं सामयिक आधार
- ❖ Yadav and Yadav : Education in the Emerging Indian Society (Hindi and English)
- ❖ रविन्द्रनाथ ठाकुर : शिक्षा के विविध आयाम: रविन्द्र नाथ की शिक्षा 1999, अक्षय प्रकाशन, ई-54, मानसरोवर पार्क, दिल्ली।
- ❖ डॉ. गमनाथ शर्मा, डॉ. राजेन्द्र कुमार शर्मा : शैक्षिक समाजशास्त्र, 1996, एट्लॉटिक पब्लिशर्स एण्ड डिस्ट्रीब्यूटर्स, नई दिल्ली--110002.
- ❖ आर.आर. रस्क, अनुवादक एल.के. आड : शिक्षा के दार्शनिक आधार, 1990, राजस्थान दिव्दी ग्रंथ अकादमी, जयपुर
- ❖ पाठक पी.डी. : शिक्षा के सामान्य सिद्धान्त, विनायक पुस्तक मंडल, आगरा,
- ❖ त्रिवेदी राम प्रसाद : समाजशास्त्र कॉलेज बुक हाउस, जयपुर।
- ❖ Saxena N.R. Swaroop Principles of Education International Publishing house Merrut (U.P)
- ❖ Smelers Neel J. Sociology : Prentice Hall of India Private Ltd New Delhi
- ❖ व्यास एन.के. : भारतीय शिक्षा की सम सामयिक समस्याएँ, विनायक पुस्तक मंडल, आगरा
- ❖ Saxena N.R Swaroop : Philosophical and Sociological foundation of Education (1995-96) Usha Printer, New Mohan Pur Merrut.
- ❖ Ruhel, Satvapal Sociology of Education-1997

Paper-II

Psycho-Social Basis of Learning And Teaching

Objectives

1. To develop an understanding of the basic concepts, methods and principles of Psychology (and of Educational Psychology with reference to learning and teaching).
2. To develop an understanding of the nature and process of learning in the context of various learning theories and factors.
3. To develop an understanding about the various factors that affect learner like personality, intelligence, creativity and motivation.
4. To develop an understanding of the impact of social and psychological factors responsible for a balanced development of personality of the learners.
5. To develop effective teaching skills in the teacher by making

6. To acquaint them with various aspects of teaching such as factors that affect it, teaching models and various teaching theories.
7. To develop necessary skills to evaluate and interpret the learning outcomes.

Contents

Unit-I

1. Educational Psychology its meaning, methods, scope, Functions and applications.
2. Implications of Educational Psychology for a Teacher, Curricula, Classroom situations and learner development.
3. Growth and Development of the learner—Growth and Development meaning, Principles (Physical, social, mental and Emotional Development) and their Implications for learning.

Unit-II

1. Learning, its meaning, factors affecting learning and types of learning. (Gagne)
2. Theories of learning : Trial and Error, classic, Conditioning, Operant Conditioning, Gestalt, Piaget and Burner.
3. Transfer of learning, factors, theories, and its Implications for teacher.
4. Motivation meaning and role in the process of learning.

Unit-III

1. Personality meaning, types, factors responsible for shaping it, objective and Projective of assessment.
2. Intelligence meaning, Theories, measurement and role in learning.
3. Creativity meaning components, development and measurement.

Unit-IV

Psychology of adjustment, concepts of adjustment, mechanism of adjustment Ego-defense mechanisms, identification and education of mal-adjusted children.

Individual differences-meaning, causes and their educational Implications, (with special reference to the slow learner, gifted, delinquent, Physically disabled and Socially deprived children)

Unit-V

- (i) Group Dynamics, Classroom as a group-its impact upon learning
- (ii) Development of a child as an individual (concept development), school and development of self-concept.
- (iii) Creative thinking, reasoning and problem-solving and the effects of social class on their development.
- (iv) Learning increments of Socialization, Individualized instruction, Diagnosing learning difficulties.

(v) Concept of Social Learning (Bandura).

Sessional Work

(20 Marks)

(1) One test of (10 Marks)

(2) Any one of the following (10 Marks)

(i) Case-study of Special child

(ii) Administration of Psychological test and presentation of the result.

(iii) Observing the behaviour of an adolescent boy/girl and listing his/her characteristics and problem.

(iv) Sociometry-preparation and interpretation.

(v) Study of community factors that effect pupil learning.

(vi) One experiment on any aspect of learning

References

1. Agarwal J.C. : Essential of Educational Psychology
Vikas Publishing House Pvt. Ltd 1995
2. Bhatia and Purohit : Educational Psychology
3. Bhatnagar, R.P. : Educational Psychology
Meenakshi Publications, Kanpur
4. Bigge : Learning Theories for Teachers Harper, N.Y. 1982
5. Blair, Jones and Simpson : Educational Psychology
Macmillan, N.Y., 1954.
6. Chauhan, S.S. : Advanced Educational Psychology
Vikas Publication House, N.D. 1990
7. Eggen, Paul : Educational Psychology
8. Hilgard, E.R. : Theories of Learning
Appleton Century Craft N.Y. 1956
9. Lindgren, H.C. : Educational Psychology in the classroom,
Macmillan, N.Y. 1956
10. Sharma, R.A. : Fundamentals of Educational Psychology
Lal Book Depot, Meerut, 1996.
11. Skinner, B.F. : Essentials of Educational Psychology
Asia Publishing House, Bombay, 1960
12. Uday Shanker : Advanced Educational Psychology
Oxonian Press Pvt. Ltd, New Delhi, 1984
13. शर्मा, रामनाथ : शिक्षा मनोविज्ञान
14. भट्टनागर, सुरेश : शिक्षा मनोविज्ञान
15. माथूर, एस.एस. : शिक्षा मनोविज्ञान
16. सिंह, उपदेश्याय : विकास एवं अधिगम के मनोसामाजिक आधार
17. रामपाल सिंह : शिक्षा में नवचिन्तन।

Paper-III : Educational Management and School Organisation

Objectives :

To enable student teacher to

1. Acquire a knowledge of the concept of Educational Administration and Management.
2. Understand the role of centre state and local agencies in managing education.
3. Acquire a knowledge of administration and supervision of education in Rajasthan.
4. Develop an understanding of the principles and practices of school organisation.
5. Develop and understanding of the main issues related to Indian educational system.

Unit-I

Concept, need, Characteristics, principles of Educational Administration and Educational Management.

Concept of authority, delegation of power, centralization and decentralization, direction, communication unity of command, TQM.

Unit-II

Concept, types, principles, styles, need, problems of Leadership. Leadership role of school HM in Institutional planning.

Concept, type aims, need of Institutional planning and financial management.

School budget, nature, process of preparation, problems and solutions.

Unit-III

Meaning, old and modern concept, types, differences objectives, principles, nature, problem, remedies of supervision and inspection.

Role of school Headmaster in Supervision and Inspection.

Concept, type, objectives, principles, nature, problem, remedies of following :

- Development and maintenance of infrastructure.
- Time table
- Planning co-curricular activities.
- School records
- Student discipline
- Overall school climate and tons.

Unit-IV

A brief survey of growth and development of education in India

(A) Pre-Independence era :

- (i) Education during Vedic, Buddhist and Medieval period.

- (ii) Development during British period (Maculay's minute)
- (B) Post-independence era :
Salient features of Secondary Education Commission 1952-53
Education commission, 1964 and National Policy on Education 1986
- (C) Major recommendations of Education Commission (1964) and NPE, 1986 for educational administration

Unit-V

Role of central and state agencies of education

- MHRD, NCTE, NECERT, CBSE, CAGE (Central Advisory Board of Education), NIEPA.
 - State Dept. of Education, RBSE, SIERT, IASE, CTE, DIET.
- Sessional Work (20 Marks)

(1) One test of 10 Marks

Any one of the following : 10 Marks

1. A detailed essay on any aspect of educational administration in India.
2. Detailed essay on any aspect of school organisation
3. Preparation of an institutional planning on any aspect of school organisation
4. A case study of a secondary school with reference to the leadership role of school Headmaster

Reference :

क्र.सं.	लेखक का नाम	पुस्तक का नाम	वर्ष	पब्लिकेशन
1.	भटनागर, सुरेश	शैक्षिक प्रबंध और शिक्षा की समस्याएँ	1996	सूर्या पब्लिकेशन, मेरठ
2.	गुप्ता, एल. टी.	उच्च शैक्षिक प्रशासन	1990	हरियाणा साहित्य अकादमी, चण्डीगढ़
3.	सुखिया, एस. पी.	विद्यालय प्रशासन एवं संगठन	1965	विनोद पुस्तक मंदिर, आगरा
4.	वशिष्ठ के. के.	विद्यालय संगठन एवं भारतीय शिक्षा की समस्याएँ	1985	लायल बुक डिपो, मेरठ
5.	देव, आचार्य महेंद्र	विद्यालय प्रबंध	1998	राष्ट्रवाणी प्रकाशन, दिल्ली
6.	शर्मा, आर. पी.	विद्यालय संगठन तथा शिक्षा प्रशासन	1995	सूर्या पब्लिकेशन, मेरठ
7.	न्यास, हरिशचन्द्र	शैक्षिक प्रबंध और शिक्षा की समस्याएँ	1996	सुखपाल गुप्त, आर्य बुक डिपो, दिल्ली
8.	अग्रवाल, प्रभा	विद्यालय प्रशासन	1972	आर्य बुक डिपो, करौल बाग, दिल्ली
9.	योगेन्द्र जगज्ज, शैक्षिक एवं विद्यालय प्रशासन		1977	विनोद पुस्तक मंदिर, आगरा

10. Kochhar, S.K.; Secondary School Administration; 1970; Sterling Publishers.
11. Mukerji, S.N.; Secondary School Administration; 1953; Acharya Book Depot Baroda
12. Mukerji, S.N.; Administration of Education in India; 1962; Acharya Book Depot, Baroda
13. Mohiyuddin, M.S.; School organisation and management; 1944; Govt of Mysore, Bangalore
14. Sharma, R.C.; School Administration; 1970; Kendriya Vidyalaya Sangathan, Delhi
15. Kabir, Humayan; Student Indiscipline; 1955; Ministry of Education, Delhi
16. Bhatnagar, R.P.; Educational Administration; 1995; Surya Publication, Meerut.
17. Mahajan, Baldev; Education Administration in Rajasthan; 1996; Vikas Publishing House, Pvt.Ltd. New, Delhi
18. Mukhopadhyay; Total Quality Management in Education; 2001; NIEPA, Delhi
19. Mathur S.S.; Education Administration; 1969; Krishana Brothers Jullundur
20. The Report of Education Commission; 1964; \Govt. of India Ministry of Education
21. The Report of Secondary Commission; 1952; Govt. of India Ministry of Education.
22. Shukla, J.C.; Administration of Education in India; 1983; Vikas Publishing House, Pvt. Ltd. Delhi.
23. Agarwal J.C.; School Administration; 1972; Arya Book Depot Karol Bagh, New Delhi.
24. Khan Mohd.; Educational Administration; 1979; Ashish Publishing House, H-12, Rajoury Garden, New Delhi.
25. Mukerjee, L.; Problems of Administration of Education of India; 1960; Kitab Mahal Allahabad.

Paper IV. Educational Technology and Classroom Management

Objectives :

After completing this course the students and teachers will be able to:

1. Explain the concept of E.T., its types, scope and role in education practice.
2. Make use of Modern information and communication technology improve teaching-learning process.

3. Differentiate the concept of teaching, learning, training and instruction.
4. Structure the content for different levels of teaching.
5. Perform content analysis and write instructional objectives in student behavioural terms.
6. Distinguish approaches, strategies and methods of teaching and thereby plan and select the most appropriate method/strategy, communication strategies/teaching aids to the context of classroom situation.
7. Identify the different teaching skills and device various teaching strategies for development of skills.
8. Explain the concept and significance of different teaching models in relation to instructional objectives.
9. Realize the importance of feed-back devices in teacher education and develop the competency to provide feed-back through different procedures.
10. Diagnose learning difficulties and to suggest remedial procedures.
11. Develop skill of computation and use of elementary statistics.
12. Construct and use of evaluation tools and techniques.

Course Content

Unit-I

- (i) Concept of Educational Technology-Scope and its role in Educational Practices
- (ii) Types of ET-Teaching Technology, Instructional Technology, Instructional Technology and Behaviour (meaning, characteristic, basic assumptions and content)
- (iii) Concept of communication, Elements of communication, Communication Skills, Teaching Learning process as the process of communication
- (iv) System Approach in Education.

Unit-II

- (i) Concept of teaching, instruction, training and learning, Relationship between teaching and learning
- (ii) Nature of teaching and maxims of teaching
- (iii) Content analysis
- (iv) Classification and specification of instructional behaviour.
- (v) Strategies of Teaching, Group discussion, Panel discussion, Team teaching, Programmed Instruction (concept, organisation, merits and limitations), Computer Assisted Instruction (CAI)

Unit-III

- (i) Concept of Teaching Effectiveness and its development.
- (ii) Meaning and concept of Teaching Skills.
- (iii) Micro-Teaching; its meaning, need and concept, micro-teaching.
- (iv) Skill of questioning, probing, illustrating reinforcement, stimulus variation and using Black Board (concept, components, and observation schedule).
- (v) Concept, steps and significance of following teaching models.
I. Enquiry Training Model
II. Concept Attainment Model.
- (vi) Concept of feed-back in teacher education. Flanders' Interaction Analysis Category System (FIACS).

Unit-IV

- (i) Concept of measurement and evaluation and purpose, types of evaluation.
- (ii) Characteristics of good test.
- (iii) Steps of achievement test construction.
- (iv) Concept and procedure of Educational diagnosis and their characteristics.
- (v) Diagnostic Test.
- (vi) Concept of Remedial teaching, Preparation of a remedial programme.

Unit-V

- (i) Importance and uses of Educational Statistics.
- (ii) Frequency distribution.
- (iii) Graphical presentation : Histogram, Frequency Polygon, Ogive,
- (iv) Measures of Central tendency mean, median and mode.
- (v) Measures of dispersion-Standard Deviation
- (vi) Correlation, its interpretation, Rank difference correlation.

Sessional Work (20 Marks)

(1) One test of 10 Marks.

(2) Any one of the following : 10 Marks

- 1. Preparation of a Diagnostic Test on a unit.
- 2. Preparation, try out and reporting of an instructional plan based on teaching strategies (any one via Group discussion, panel discussion, team teaching).
- 3. Observation of two lessons of the same student-teacher for encoding and decoding on the basis of FLACS, FIACS
- 4. Preparation of Action plan.

References :

- ❖ Agarwal, Y.P. : Statistical Method; concept, Application and

- Computation: Sterling publisher Pvt. Ltd. New Delhi, 1980.
- ❖ Allen, D. and Ryan K. Micro Teaching, New York, Addison Wesley, 1969
 - ❖ Bamard, H.C. An Introduction to teaching U.I. Publication U.S.A. 1970.
 - ❖ Bloom, B.S. Taxonomy of Educational Objectives-Cognitive Domain Book-I, McKay, New York
 - ❖ Chauhan, S.S. Innovation in teaching learning process, Vikas Publication, New Delhi, 1990
 - ❖ Coulson, J.E. (Ed) Programmed learning and computer based instruction New York, 1990.
 - ❖ Coulson, J.E. (Ed) Programmed learning and computer based instruction, New York, Wiley, 1962.
 - ❖ Douglass, H.R. Trends and Issues in Secondary Education Prentice Hall of India (P) Ltd. 1965 New Delhi 1965.
 - ❖ Flanders, N.A. Analyzing Teaching Behaviour, Addison Wesley, Pub. Co., London, 1972.
 - ❖ Garrett, Henry, E. Statistics in Psychology And Education Vakils, Fetter and Simors, Bombay, 1996.
 - ❖ Grom-Lund, N.E. Stating Behavioral Objectives for classroom Instruction Macmillan Co., London, 1970
 - ❖ John P. De Cecco, William R. Crawford. The Psychology of learning and Instructions, Prentice Hall of India Pvt. Ltd. New Delhi, 1977 Second Edition.
 - ❖ Joyce, B. Well, M. Models to Teaching Prentice Hall inc, Englewood Cliff, New Jersey, 1985
 - ❖ K.K. Vasistha. Teacher Education in India, Concept Publishing Company, New Delhi.
 - ❖ Passi, B.K. and Lalit, M.S. Micro Teaching Approach Ahmedabad, Sahitya Mundranalya.
 - ❖ Parthak, C.K. Distance Education : Prospect and Constraints, Raj Publication, New Delhi
 - ❖ Rajanna, R.K. Education in Digital Age, Ragat Publication, New Delhi.
 - ❖ Rubing, S.P. Educational Technology, Raj Prakashan, New Delhi, 1973
 - ❖ Saxena, N.R. Swaroop. Oberoi S.C. Technology of Teaching, Star Publication, Lal Book Depot, 1996
 - ❖ Sharma, R.A. Technology of Teaching Meerut, 1989
 - ❖ Skinn, B.F. Technology of Teaching, Appleton Century Crofts, N.Y., 1981.

- ❖ Thompson. James J. : Instructional Communication, Van Nostrand Reinhold Co., New Jersey. 1969.
- ❖ Verma Ramesh : Suresh K. Sharma : Modern trends in Teaching Technology Co., Anmol Publications Pvt. Ltd. New Delhi. 1990.
- ❖ पुरोहित, जगदीश नारायण : शिक्षण के लिए आयोजन, हिन्दी ग्रंथ अकादमी, जयपुर, 1982
- ❖ शर्मा, आर.ए. : शिक्षण तकनीकी मॉडर्न पब्लिकेशन, मेरठ, 1989
- ❖ बघेला, हेतसिंह : शैक्षिक प्रौद्योगिक राजस्थान हिन्दी ग्रंथ अकादमी, जयपुर, 1996
- ❖ मिश्र, संतोष : शैक्षिक तकनीकी
- ❖ पुरोहित, जगदीश नारायण : भावी शिक्षकों के लिए आधारभूत कार्यक्रम, राजस्थान हिन्दी ग्रंथ अकादमी, जयपुर
- ❖ कथूरिया रामदेव, पी. सूक्ष्म अध्यापन : विनोद पुस्तक मंदिर, आगरा, 1996
- ❖ कपूर उर्मिला : शैक्षिक तकनीकी
- ❖ वेण्गोपाल एवं अन्य : प्रारम्भिक कम्प्यूटर अनुप्रयोग, हिमांशु पब्लिकेशन, उदयपुर।

पेपर-5 एवं 6

हिन्दी-शिक्षण

उद्देश्य—

1. भाषा संरचना में हिन्दी भाषा तत्त्वों का ज्ञान देना।
2. श्रवण, भाषण, वाचन एवं लेखन सम्बन्धी भाषायी कौशल का ज्ञान देना।
3. ईकाई, दैनिक व सूक्ष्म पाठ योजनाओं के महत्त्व से अवगत कराना व निर्माण का ज्ञान देना।
4. हिन्दी भाषा शिक्षण प्रणालियों के उपयोग का ज्ञान देना।
5. हिन्दी की विद्याओं एवं उनके व्यावहारिक शिक्षण की संस्थितियों का ज्ञान देना।
6. हिन्दी भाषा शिक्षण में दृश्य, श्रव्य उपकरणों के व्यावहारिक उपयोग का ज्ञान देना।
7. हिन्दी शिक्षण में मूल्यांकन के महत्त्व, मूल्यांकन की संस्थितियों व विद्याओं का ज्ञान देना।
8. निदानात्मक एवं उपचारात्मक परीक्षण के अर्थ, स्वरूप, महत्त्व एवं उपयोग का ज्ञान देना।
9. मातृभाषा एवं राष्ट्रभाषा के रूप में हिन्दी की स्थिति से अवगत कराना।

इकाई (1)

1. भाषा का वैज्ञानिक स्वरूप (वर्ण विचार, शब्द विचार एवं वाक्य विचार की दृष्टि से)
2. भाषायी कौशलों के विकास हेतु निम्नांकित पक्षों के स्वरूप का शिक्षण :
(क) श्रवण (ख) उच्चारण (ग) वर्तनी (घ) वाचन (सस्वर एवं मौन) (ङ) अभिव्यक्ति (मौखिक एवं लिखित)
3. मातृभाषा/राष्ट्रभाषा के रूप में हिन्दी शिक्षण की स्थिति।

4. पुस्तकालय एवं वाचनालय का हिन्दी भाषायी विकास में अयोजन।
5. मातृभाषा का अन्य विषयों के साथ समन्वय।

इकाई (2)

1. मातृभाषा और उसका महत्त्व
2. मातृभाषा शिक्षण के उद्देश्य
3. मातृभाषा के सिद्धांत
4. कक्षा शिक्षण के सिद्धांत

इकाई (3)

1. हिन्दी की विभिन्न विधाओं का शिक्षण
 (क) गद्य शिक्षण (व्यापक एवं गहन पाठ रूप में एवं दूर पाठ रूप में)
 (ख) पद्य शिक्षण (रस पाठ एवं बोध पाठ रूप में)
 (ग) नाटक शिक्षण (वाचिका एवं अभिनयात्मक रूप में)
 (घ) कहानी शिक्षण (औपचारिक एवं व्यावहारिक शिक्षण के रूप में)
 (ङ) अध्यात्म शिक्षण (औपचारिक एवं व्यावहारिक शिक्षण के रूप में)
 (च) व्याकरण शिक्षण
2. हिन्दी शिक्षण में दृश्य उपकरणों का महत्त्व एवं उपयोग।
3. हिन्दी भाषा शिक्षण में पाठ्य पुस्तक का महत्त्व।

इकाई (4)

हिन्दी शिक्षण में निम्नलिखित विधियों का ज्ञान एवं उपयोग तथा प्रथम तीन के पाठ्य पुस्तक।

- | | |
|-----------------------|----------------------------|
| (क) प्रायोजन विधि | (ख) पर्यवेक्षण अध्ययन विधि |
| (ग) अभिक्रमिक अनुदेशन | (घ) क्षेत्रीय भाषण |
| (ङ) सामुदायिक संसाधन | (च) कम्प्यूटर |
| (ज) दूरदर्शन | (झ) भाषा प्रयोगशाला |

इकाई (5)

1. पर्याय शिक्षण में मूल्यांकन :
 (क) मूल्यांकन का अर्थ एवं विशेषतायें
 (ख) पाठान्तर्गत, पाठोपरान्त मूल्यांकन
 (ग) मूल्यांकन एवं निर्माण एवं नीति यत्र
 (घ) मूल्यांकनों के विभिन्न प्रकार एवं रचना
2. हिन्दी भाषा शिक्षण संबंधी विषय वस्तु का विश्लेषण
 (क) पाठ योजना निर्माण एवं प्रकार—दैनिक पाठ योजना एवं इकाई योजना

सत्रीय कार्य (20 अंक)

- (1) पर्याय परीक्षा (10 अंक)
- (2) निम्नोक्त में से कोई एक (10 अंक)

1. किन्हीं दो शिक्षण कौशल के लिए सूक्ष्म पाठ निर्माण करना।
2. व्याकरण के किसी एक विषय पर श्रृंखला अभिक्रम का निर्माण करना।
3. ईकाई या वार्षिक प्रश्न पत्र का निर्माण।
4. एक पुस्तक की समीक्षा।
5. सहायक सामग्री के रूप में दो ट्रान्सपैरेसीज तैयार करना।
6. व्याकरण शिक्षण से संबंधित दो चार्ट तैयार करना।

संदर्भ पुस्तक

1. हिन्दी शिक्षण : रमन बिहारी लाल
2. हिन्दी भाषा शिक्षण : भाई योगेन्द्र जीत
3. माध्यमिक विद्यालयों में हिन्दी शिक्षण : निरंजन कुमार सिंह
4. हिन्दी भाषा शिक्षण : भोलानाथ तिवारी तथा कैलाशचंद्र भाटिया
5. भाषा शिक्षण : रवीन्द्रनाथ श्रीवास्तव
6. हिन्दी शिक्षण : राजेन्द्र प्रसाद श्रीवास्तव
7. हिन्दी शिक्षण पद्धति : वैद्यनाथ प्रसाद वर्मा
8. हिन्दी शिक्षण : वी.एन. शर्मा
9. हिन्दी शिक्षण : डॉ. रमन लाल मांडेय
10. मानक हिन्दी व्याकरण : आचार्य रामचंद्र वर्मा
11. भाषा : ब्लूम होल्ड
12. राष्ट्रभाषा हिन्दी की समस्याएँ एवं समाधान : डॉ. देवेन्द्र नाथ
13. शुद्ध हिन्दी : डॉ. मुरारी लाल
14. हिन्दी शब्दानुशासन : किशोरीदास वाजपेयी
15. हिन्दी प्रत्यय विचार : भगवती प्रसाद शुक्ल
16. शब्दार्थ दर्शन : रामचन्द्र वर्मा
17. हिन्दी उच्चारण एवं वर्तनी : भगवती प्रसाद शुक्ल
18. हिन्दी ध्वनियाँ और उनका शिक्षण : के.के. सुखिया
19. नागरी लिपि और हिन्दी वर्तनी : अनन्त चौधरी
20. अभिव्यक्ति विज्ञान : भोलानाथ तिवारी तथा कृष्ण शर्मा
21. भाषा सम्प्रति मूल्यांकन : के.जी. रस्तोगी
22. व्यावहारिक हिन्दी व्याकरण : हरदेव बाहरी

संस्कृत शिक्षण

उद्देश्य :

छात्राध्यापक :

1. भाषा कौशल एवं तृतीय भाषा शिक्षण के आधारभूत सिद्धांत एवं उद्देश्यों को जान सकेंगे।
2. संस्कृत भाषा के विभिन्न कौशलों का पृथक् एवं समन्वित शिक्षण कर सकेंगे।

3. विभिन्न विधाओं के सफल अध्यापन हेतु विभिन्न विधियों एवं उपकरणों का प्रयोग कर सकेंगे।
4. संस्कृत भाषा शिक्षण में दृश्य-श्रव्य सामग्री का निर्माण एवं प्रयोग कर सकेंगे।
5. संस्कृत शिक्षण में मूल्यांकन हेतु प्रश्न पत्र निर्माण कर, कौशलवाधारित परीक्षण कर सकेंगे।
6. छात्रों की अशुद्धियों का कौशलानुसार निदान एवं उपचार अध्यापन कर सकेंगे।

इकाई-प्रथम

1. तृतीय भाषा शिक्षण के सिद्धांत - महत्त्व, प्रकार, मनोवैज्ञानिक, भाषायी तथा शिक्षण विज्ञान सम्बन्धी सिद्धान्त
2. (अ) भाषायी कौशल—
 - (1) अवबोध कौशल
 - (2) अभिव्यक्ति कौशल
 - (3) उच्चारण कौशल एवं उनका महत्त्व
3. तृतीय भाषा के रूप में संस्कृत शिक्षण के उद्देश्य—
 - (1) माध्यमिक स्तर पर
 - (2) उच्च माध्यमिक स्तर पर

इकाई-द्वितीय

1. भाषायी कौशल शिक्षण : सम्प्रत्यय, महत्त्व, विधि, प्रविधि—
 - (1) श्रवण कौशल—स्वर, व्यंजन, क्लाघात, स्वरगघात, आरोह, अवरोह, लय इत्यादि।
 - (2) कथन कौशल—स्वर, व्यंजन, क्लाघात, स्वरगघात, आरोहावरोह, लय इत्यादि एवं मौखिक अभिव्यक्ति।
 - (3) पठन कौशल—वर्ण, शब्द, अक्षर पहचान, अवबोध, सम्यक् वाचन, मौनवाचन।
 - (4) लेखन कौशल—अभिव्यक्ति कौशल, लेखन तकनीक के तत्त्व (Mechanics of writing)।

उपरोक्त कौशलों में सहसम्बन्ध एवं समन्वयात्मक शिक्षण।

इकाई तृतीय

1. तृतीय भाषा के रूप में संस्कृत शिक्षण की विधियाँ एवं प्रविधियों के सम्प्रत्यय, महत्त्व, प्रक्रिया, विशेषतायें एवं क्रियाएँ—
 - (1) उन्वक्ष विधि (Direct Method)
 - (2) संरचनात्मक उपागम (Structural Approach)
 - (3) संप्रेषण उपागम (Communicative Approach)
 - (4) समन्वित उपागम (Integrated Approach)
2. संस्कृत विधियों का अभिन्नांकित दृष्टि से अध्ययन एवं प्रयोग। तृतीय भाषा अध्यापन मनोविज्ञान।

- (2) संस्कृत भाषा की प्रकृति
- (3) ऋक्षा-कक्ष वातावरण और परिस्थितियाँ
- (4) भाषा का व्यवहार में प्रयोग
- (5) भाषा शिक्षण के उद्देश्य
- (6) मातृभाषा की भूमिका
- (7) शिक्षक, छात्र पाठ्य पुस्तक तथा दृश्य-श्रव्य सहायक सामग्री की भूमिका
- (8) त्रुटियाँ व उपचारात्मक कार्य
- (9) परीक्षण एवं मूल्यांकन

इकाई-चतुर्थ

1. तृतीय भाषा (संस्कृत) शिक्षण में दृश्य-श्रव्य सामग्री—
 - (1) सम्प्रत्यय, महत्त्व एवं सावधानियाँ
 - (2) निम्नांकित का चयन निर्माण एवं इनके प्रयोग के सिद्धांत
(अ) श्यामपट्ट, चित्र, चार्ट, शब्द चित्र, फ्लैटल बोर्ड, रेडियो, कम्प्यूटर, इंटरनेट एवं ओ.एच.पी.
(ब) अभिनय, युग्म कार्य, समूह कार्य।
2. संस्कृत पाठ्य सामग्री का शिक्षण : निम्नांकित का सम्प्रत्यय, महत्त्व, प्रयोग, विधि, प्रविधि, शिक्षण सामग्री एवं गुण-दोष।
 - (1) व्याकरण शिक्षण
 - (2) गद्य शिक्षण
 - (3) नाटक शिक्षण
 - (4) कहानी विकास शिक्षण
 - (5) संवाद शिक्षण
 - (6) पद्य शिक्षण
 - (7) रचना शिक्षण
 - (8) अनुवाद शिक्षण

इकाई-पंचम

1. मूल्यांकन
 - (1) भाषा में मूल्यांकन का सम्प्रत्यय, अर्थ, महत्त्व।
 - (2) तृतीय भाषा में मूल्यांकन का सम्प्रत्यय, व्याकरण, अनुवाद एवं भाषा कौशलों का मूल्यांकन।
 - (3) तृतीय भाषा के रूप में संस्कृत का मूल्यांकन—अर्थ सम्प्रत्यय एवं महत्त्व
 - (4) प्रश्न पत्र निर्माण (ब्लू प्रिंट)
2. निदानात्मक एवं उपचारात्मक शिक्षण : सम्प्रत्यय, महत्त्व, शिक्षण एवं सामग्री निर्माण के सिद्धान्त।
 - (अ) संस्कृत में निम्नांकित का निदानात्मक एवं उपचारात्मक शिक्षण :

- (1) श्रवण सम्बन्धी
- (2) कथन सम्बन्धी
- (3) पठन सम्बन्धी
- (4) लेखन सम्बन्धी
- (5) व्याकरण सम्बन्धी

सत्रीय कार्य (20 अंक)

- 1) एक परीक्षा (10 अंक)
- 2) निर्देश : निम्नांकित में से किसी एक पर सत्रीय कार्य (10 अंक)
 1. माध्यमिक स्तर की किसी एक संस्कृत पाठ्य पुस्तक की समीक्षा।
 2. पाठ्य पुस्तक में सम्मिलित भाषागत अभ्यास कार्य की सूची बनाना एवं उनकी समीक्षा।
 3. संग्रन्थन उपागम पर आधारित अभ्यास कार्य की पाँच तालिकाएँ बनाना।
 4. विभिन्न कौशलों पर आधारित 20 प्रश्नों का निर्माण करना।
 5. रचना पाठ के लिए पाँच चित्रों का निर्माण तथा उच्चारण सुधार हेतु पाँच अभ्यासिकाएँ बनाना।
 6. व्याकरण शिक्षण हेतु चित्र एवं अधिगम सामग्री का निर्माण (5 पृष्ठ)
 7. पत्र शिक्षण हेतु अभ्यास सामग्री का निर्माण (5 पृष्ठ)
 8. कहानी शिक्षण हेतु पाँच चित्र एवं अधिगम सामग्री का निर्माण (5 पृष्ठ)
 9. संवाद शिक्षण हेतु पाँच चित्र एवं अधिगम सामग्री का निर्माण (5 पृष्ठ)
 10. सम्प्रेषण उपागम आधारित शिक्षण सामग्री का निर्माण करना (5 पृष्ठ)
 11. आगमन-निगमन उपागम पर आधारित व्याकरण शिक्षण सामग्री का निर्माण (5 पृष्ठ)

सन्दर्भ सूची

1. ब्लूम, फील्ड, अनुवादक-प्रसाद, डॉ. विश्वनाथ (1968), 'भाषा', दिल्ली-7, बंगलो रोड, जवाहर नगर।
2. Damoon, C. Howard, Postman, Neil, (1965). "The Uses of Language". New York, Holt, Rinehart and Winston, Inc.
3. Freeman, D.L. (2000). "Techniques and Principles in Language Teaching". (II edition) O.U.P.
4. Lado, Robert (1961). "Language Teaching", London : Longman.
5. Lado, Robert (1971). (HM, Ed) "Language Teaching", New Delhi : Tata McGraw Hill Publishing House Co. Ltd.
6. Mackey, William Francis. (1965) "Language Teaching". Analysis. London : Longmans, Green & Co. Ltd.
7. मित्तल डॉ. संतोष (1999-2000) 'संस्कृत शिक्षण', मेरठ, आर. लाल डिपो।
8. नारंग वैश्रा (1996), 'सम्प्रेषणात्मक भाषा शिक्षण', नई दिल्ली, प्रकाशन संस्थान, दयानन्द मार्ग।

9. Palmer H.L. (1964-65) : "The Principles of Language Study". London : O.U.P.
10. Paliwal, Dr. A.K. (2002), "Communicative Language Teaching", Jaipur : Surbhi Publication.
11. Richards, J.C. and Rodgers, T.C. (1986), "Approaches and Methods in Language Teaching", Cambridge : CUP.
12. सफाया, अर.एन. (1990), 'संस्कृत शिक्षण, चण्डीगढ हरियाणा साहित्य अकादमी।'
13. Sharma, Bela Rani, (2002) "Modern Methods of Teaching Sanskrit", New Delhi, 110088, Vedonus Books (P) Ltd. Vardhaman Charve Plaza-IV, Building 9, K.P. Block, Pitampura.
14. शर्मा, डॉ. रामविलास (2001), 'ऐतिहासिक भाषा विज्ञान और हिन्दी भाषा', नई दिल्ली, राजकमल प्रकाशन, 1-बी, नेताजी सुभाष मार्ग।
15. शास्त्री, डॉ. सूर्यदेव, 1973, 'मनोभाषिकी' पटना, बिहार हिन्दी ग्रंथ अकादमी।
16. Sweet Henry, (1964), "The practical Study of Language", A Guide for Teachers and Learners, London, Oxford University Press.
17. तिवारी, भोलानाथ, एवं श्रीवास्तव, रवीन्द्रनाथ (1971) , 'भाषिकी', दिल्ली, नेशनल पब्लिशिंग हाउस।
18. त्रिपाठी, रामसुरेश, (1972), 'संस्कृत व्याकरण दर्शन' दिल्ली-6, राजकमल प्रकाशन प्रा.लि., 7 फैज बाजार।
19. Widdowson, H.G. (1978), "Teaching Language as Communication Oxford O.H.P.

METHODOLOGY OF TEACHING ENGLISH

Objectives : To enable the student teachers to—

1. Develop a good understanding of the basic concepts in second language teaching.
2. Teach basic language skills as listening, speaking, reading and writing and integrate them for communicative purpose.
3. Critically review and use appropriately different approaches and methods of teaching English as second language.
4. Prepare lesson plans on different and prescribed aspects of English as second language.
5. Choose, prepare and use appropriate audio visual teaching aids for effective teaching of English.
6. Use various techniques of testing English as second language and develop remedial and conduct teaching.

Course Content

Unit 1 : Basic Concepts, Objectives, and Methods of Teaching English As A Second Language.

(A) Basic Concept :

1. Mother-tongue
2. Second Language
3. Difference between teaching and language teaching.
4. Principles of Second Language Teaching.
5. Forms of English-Formal, Informal, Written, Spoken, Global English.
6. English as a Second Language (ESL), English as a Foreign Language (EFL), English for Specific Purpose (ESP).

(B) Objectives

Objectives of Teaching English as a Second language.

(a) Skill based (LSRW) (b) Competence based : Linguistic Competence (LC) and Communicative Competence (CC) in reference to LSRW skills.

(C) Methods And Approaches :

Introduction to methods of and approaches to teaching of English as a second language.

- (1) (a) Direct Method
- (b) Structural Situational Approach
- (c) Audio-Lingual Method
- (d) Bilingual Method
- (e) Communicative Language Teaching (CLT)
- (2) Role of Computer and Internet in Second Language Teaching-Computer Assisted Language Learning (CALL) Computer Assisted Language Teaching (CALT).
- (3) Eclectic Approach to Second Language Teaching.
Study of the above methods and approaches in the light of :
 - (a) Psychology of second language learning.
 - (b) Nature of the English Language.
 - (c) Classroom environment and conditions.
 - (d) Language functions
 - (e) Aims of language teaching, role of mother-tongue, role of teacher learners, text-books and A.V. aids, language skills, testing, errors and remedial work.

Unit-2 : Teaching of listening and speaking skills.**(a) Listening :**

- (i) Concept of listening in second language.
- (ii) The phonetic elements involved in listening at the receptive level.
(Monothongs, diphthongs, consonants, pause, juncture, stress, accent, beat, intonation, rhythm)

- (iii) Listening skills and their sub-skills,
- (iv) Authentic listening vs Graded listening.
- (v) Techniques of teaching listening.
- (vi) Role of teaching aids in teaching listening skills;
- (vii) Note-taking.

(b) Speaking :

- (i) Concept of listening in second language;
- (ii) The phonetic elements involved in listening at the receptive level.
(Monothongs, diphthongs, consonants, pause, juncture, stress, accent, beat, intonation, rhythm);
- (iii) The Stress System : Weak Forms and scheme
- (iv) Use of pronouncing dictionary,
- (v) Phonetics transcription.
- (vi) Techniques of teaching speaking skills and pronunciation.
Pronunciation practice and drills-Ear Training, Repetition, Dialogues and Conversation :
- (vi) Role of A.V. aids in teaching speaking skills.

Unit-3 : Teaching, Reading and Writing skills :

Reading Skills :

- (i) Concept of Reading in second language,
- (ii) Mechanics of Reading (Eye span, Pause, Fixations, Regression);
- (iii) Types of Reading: Skimming, Scanning, Silent reading, Reading aloud, Intensive Reading, Extensive reading, Local and Global Comprehension.
- (iv) Role off speed and pace;
- (v) Relating teaching of Reading to listening and speaking skills;
- (vi) Teaching silent reading, intensive reading, extensive reading and genuine reading comprehension in terms of Inference Prediction, Critical Reading, Interpretation, Judgement, Summarizing, Central idea, etc.
- (vii) Role of course reader and rapid reader, Cloze procedure, Maza method, dictionary in teaching Reading skills.

Writing Skills :

- (a) Written skills;
- (b) Concept of Writing in First Language and the Second Language;
- (c) Types of composition oral, written, controlled, guided, contextualized, and integrated composition;
- (d) Teaching the following items keeping in view their style, ingredients and mechanics:
Letters (Formal and informal), Essays, Report, Telegram.

E-mail, Notices, Precis, Paragraph, Developing stories, Note Making.

Unit-4 : Resources And Planning For English Language Teaching

(a) Resources For English Language Teaching :

- (i) The Blackboard and the white Board
- (ii) Blackboard drawings and sketches
- (iii) The Overhead Project (OHP)
- (iv) Flashcards, Posters and Flip Charts
- (v) Songs, raps and chants
- (vi) Video clips
- (vii) Pictures, Photos, Postcards, and Advertisements
- (viii) Newspapers, Magazines and Brochures
- (ix) Mind Maps
- (x) Radio, Tape-recorder, T.V.
- (xi) Language Laboratory
- (xii) Realia
- (xiii) Stories and anecdotes

(B) Planning For English Language Teaching as A Second Language

(B.1) : Prose Lessons :

- (i) Content analysis :
 - (a) Planning a Unit Bases on a lesson in the Course Reader (text book)
 - (b) Identifying and listing language material to be taught (New lexical and structural items, their usage and uses)
- (ii) Planning for teaching the content and skills in the following order :
 - (a) New lexical items (vocabulary)
 - (b) New Structural items
 - (c) Reading comprehension
 - (d) Textual exercises
 - (e) Writing/composition
 - (f) Unit Test

(B-2) : Poetry Lessons :

- (i) Components of Poetry
- (ii) Concept, aims and objectives of teaching, Poetry in Second Language
- (iii) Steps of teaching, Poetry at the Secondary stage

Unit 5 : Testing and Evaluation in English

Concept of testing and evaluation in English as a second language.

— Difference in Testing in content-subjects and skill-subjects:

- Testing language skills (LSRW), lexical and structural items, and poetry.
- Type of test (Achievement test, Proficiency test, Diagnostic test, prognostic test, Formative and Summative Test).
- Preparation of unit test and examination paper-their blue print and answer key;
- Types and preparation of test-items.
- Error analysis;
- Concept and need of remedial teaching and remedial work.

Sessional Work (20 Marks)

- (1) One test of (10 Marks)
- (2) The Student will be required to do any one of the following : (10 Marks).
 1. Review of a textbook.
 2. Preparation of a list of structural items included in the text-book at the Secondary stage and its critical analysis.
 3. Preparation of five (5) word-cards, five (5) picture cards and five (5) cross word puzzles.
 4. Preparation of twenty (20) test items in Listening/Speaking/Readings/Writing Skill.
 5. Preparation of five (5) OHT for teaching structures/compositions exercises.
 6. Preparation of CALL material (five (5) pages.).
 7. Preparation of CALT material (five (5) Pages).
 8. Preparation of Language Lab. Material on Listening/Speaking skill. (five (5) Pages.)
 9. Collection of Newspaper and Magazine advertisement for teaching lexical and structural items and preparing language exercises based on them.

Bibliography

1. Bansal, R.K. and Harrison, J.B. (1972) : Spoken English for India, Madras: Orient Longman Ltd.
2. Baruag, T.C. (1985) : The English Teacher's Handbook : New Delhi Starling publishing Pvt. Ltd.
3. Bright and McGregor : Teaching English as Second Language, Longman.
4. Brumfit, C.J. (1984) : Communicative Methodology in Language Teaching, Cambridge; C.U.P.
5. Collins Cobuild English Grammar (2000) Harper Collins Publisher, India.
6. Doff, A (1988) Teach English; Cambridge: CUP.

7. Freeman, Diane-Larsen (2000) : **Techniques and Principles in Language Teaching**, Oxford : OUP
8. Gimson A.C. (1980) : **An Introduction to the Pronunciation of English**, London, Edward Arnold.
9. Hornby, A.S. (1968) : **A Guide to Patterns and Usage in English** Oxford: OUP.
10. Lado, Robert (1971) : **Language Teaching**, New Delhi, Tata McGraw Hill Publishing House Co. Ltd.
11. Leech Geoffrey and Svartvil, **Jan** (2000) **Communicative Grammar of English** Cambridge, C.U.P.
12. Paliwal, A.K. (1988) : **English Language Teaching** Jaipur; Surbhi Publication.
13. Palmer, H.L. (1964-65) : **The Principles of Language Study**, London : O.U.P.
14. Quirk, Randolph and Greenbaum, (1973) : **A University Grammar of English**, London.
15. Richards, J.C. and Rodgers, T.S. : **Approaches and Methods in Language Teaching**, Cambridge C.U.P.
16. Roach, Peter, (1991) : **English Phonoetics and Phonology**, Cambridge, C.U.P.
17. Thomson, A.J. and Martiner (1998) **A Practical Grammer**, ELBS, O.U.P.
18. Ur, P. 1996. **A course in Language Teaching** Cambridge, CUP.
19. Venkateshwaran, S (1995) **Principles of Teaching English**, Delhi : Vikas Publishing House Pvt. Ltd.
20. Willis, Jane; **Teaching English Through English**, O.U.P.
21. Woodward, Tessa (2001) **Planning Lessons and Courses**, Cambridge; CUP.

METHODOLOGY OF TEACHING URDU

Objectives : To enable student teachers to :

1. Understand the basic concepts in **and** functions of Language with special reference to Urdu.
2. Acquire a knowledge of objectives of teaching Urdu at the Secondary stage.
3. Acquire a knowledge of different **methods** of teaching Urdu at the Secondary stage.
4. Teach Grammar, Prose, **Composition and Poetry** lessons in Urdu.
5. Prepare lesson and Unit plans and **to analyse** the subject content in terms of Language skills and **teaching** objectives.
6. Knowledge of evaluation system **in** Urdu and to methodically prepare Exams. and test papers in Urdu.
7. Conduct remedial teaching in Urdu.

Contents

Unit-I

1. **Language** : Importance and functions with special reference to the Urdu language.
2. Language skills, Listening and Art of Listening.
Speaking-Pronunciation, Recitation and Punctuation
Reading-Aloud. silent, Intensive and Extensive
Writing-Knowledge of Urdu script.
 - (i) Khat-e-Naskh
 - (ii) Khat-e-Nastaliq
 - (iii) Khat-e-ShikashtPlace of Urdu language in the present educational system as prevalent in the State of Rajasthan.
Suggestions for a better place of Urdu in the syllabi.
Relation of Urdu with other Indian Languages.

Unit-II

- Objectives of teaching Urdu at Secondary stage of education.
Problems of teaching and learning Urdu and their solutions.
Value outcomes of teaching, Urdu at different levels of education.
Methods of teaching Urdu : (i) Direct Methods, (ii) Structural Methods, (iii) Grammar Methods, (iv) Translation Methods.

Unit-III

- Teaching of various forms of Urdu Literature : (i) Prose, (ii) Composition, (iii) Grammar, (iv) Poetry; Ghazal, Nazam and Drama.

Support system of teaching Urdu; Visual aids; Verbal, Pictorial (non-projected-two and three dimensional), projected, still and motion, Audio and Audio-visual aids.

Co-curricular activities, Language Laboratory.

Unit-IV

Planning for Teaching Urdu; Need and Importance of Planning, Content Analysis.

Yearly Plan, Unit Plan and Daily Lesson Plan.

Unit-V

Purpose of concept of Evaluation in Urdu

Techniques of evaluation, Teacher made test, Examination Paper Design and blue print, various types of Questions and their uses for Evaluation.

Sessional Work (20 Marks)

- (1) One test of 10 marks
- (2) Any one of the following (10 Marks)

- i. Preparation of One Achievement Test.
- ii. Analysis of one text book prescribed at the Secondary Stage
- iii. Writing knowledge, Understanding and skill objectives of teaching prose and poetry with specifications (5 for each area).
- iv. Preparation of two teaching aids useful for Urdu teaching.
- v. Preparation of a lesson plan for remedial teaching.

Bibliography

<i>S.N.</i>	<i>Author</i>	<i>Title</i>	<i>Publisher</i>
1.	Muenuddin;	Hum Urdu Kaise Padhen;	National Council for Promotion of Urdu Language, West Block, RK Puram, New Delhi.
2.	Muenuddin;	Urdu Zaban Ki Tadrees;	National Council for Promotion of Urdu Language, West Block, RK Puram, New Delhi.
3.	Inamullah Sharwani;	Tadrees-e-Zaban-e-Urdu;	Usmania Book Depot, 1-25, Rabindra Saraud, Cal. 73.
4.	Rasheed Hasan;	Hum Urdu Kaise Likhen;	Maktaba Jamia Ltd. Jamia Nagar, New Delhi.
5.	Rasheed Hasan;	Urdu Imla;	Maktaba Jamia Ltd. Jamia Nagar, New Delhi.
6.	Maulvi Abdul;	Quwaid-e-Urdu;	Anjuman Taraqqi Urdu (Hind), New Delhi.
7.	Afazal Hyssain;	Fun-e-Ataleem aur Tarbeet;	Makazi Maktaba Islam, Delhi.
8.	Akhta Ansar, Ghazai and Dars-e-;	National Council for Promotion of Urdu Language.	West Block, RK Puram, New Delhi.

METHODOLOGY OF TEACHING SOCIAL STUDIES

Objectives : To enable the student teacher to :

1. Define and differentiate the concept of Social Studies and explain its relative position in the Syllabus.
2. Understand the aims and objectives of teaching Social Studies.
3. Prepare Unit plans and Lesson plans for different classes.
4. Critically evaluate the existing school syllabus of Social Studies.
5. To enable the pupil teacher to review the Text-book of Social Studies (Secondary level).
6. Apply appropriate methods and techniques of teaching to particular topic at different levels.
7. Prepare, select and utilise different teaching aids.
8. Evaluate his pupils in Social Studies.
9. Clarify particular concepts, trends, principles, methods etc. with the help of Co-relation to similar Content of situation.

Unit-I : Nature, Scope and Objectives

- Nature, scope and concept of Social Studies.
- Importance
- Aims and Objectives of teaching Social Studies as different levels
- Co-relation of Social Studies with other school subjects.

Unit-II : Curriculum and Planning

- Nature, scope and concept of Social Studies.
- Characteristics of good Social Studies curriculum.
- Critical appraisal of Social Studies curriculum.
- Concept and objective of lesson planning.
- Planning of daily lesson plan, unit plan and yearly lesson plan.
- Social Studies text books.
- Qualities, role and professional growth of a teacher of Social Studies.

Unit-III : Instructional Strategies, Methods and Approaches

- Various methods of teaching Social Studies (Lecture, Socialized recitation Story Telling, Project, Problem Solving Methods.
- Field trips
- Other innovative practices (Brain storming, role Playing)

Unit-IV : Instructional Support System

- Planning of Social Studies lab and its use.
- Use of mass media and Computers in Social Studies teaching.
- Resource material-use of local resources in teaching social studies.

Unit-V : Evaluation of Teaching Social Studies

- Concept and objectives of evaluation
- Tools and techniques of evaluation in social studies teaching.
- Preparation of achievements test
 - (i) Different types of question
 - (ii) Blue Print
 - (ii) Preparation of question papers.

Sessional Work (20 Marks)

- (1) One test of 10 Marks
- (2) Any one of the following (10 Marks)
 1. Content analysis and preparation of instructional material related to any unit of subject related to Social Studies.
 2. Preparation of TV/Radio Script.
 3. Study of anyone aspect of social issue and prepare report.
 4. Collection of newspaper cutting related to Social Study's issues.
 5. Construction of different objective types test items.

Bibliography/Book for study & reference

- 1 Bining and Bining : Teaching of Social Studies.

2. Brantom F.K. : The Teaching of Social Studies in Changing World.
3. Dray and David Jordon : A Hand Book of Social Studies.
4. Hamming, James : The Teaching of Social Studies in Secondary School.
5. Wesley Edger Brose : Social Studies for Schools.
6. Taneja, V.R. : Teaching of Social Studies.
7. Horn, E.E. : Methods of instruction in the Social Studies.
8. Kochhar, S.K. : Teaching of Social Studies in Hindi Edition.
9. Bhuwadeshwar Prasad : Social Studies Teaching in Indian Schools.
10. Sharma, M.B. : Method of Social Science Teaching.
11. Jain Ameerchand : Social Science Teaching.
12. Ram Pal Singh : Social Studies Teaching.

METHODOLOGY OF TEACHING CIVICS

Objectives : To enable the Student teachers to—

1. Refresh the knowledge of Student teacher about the meaning and importance of Civics.
2. Establish Co-relation of Civics with other school subjects.
3. Apply appropriate methods in teaching particular topics at a different level.
4. Select and use relevant teaching aids.
5. Imbibe and develop basic teaching skills.
6. Clarify particular concepts, trends, principles, methods etc. with the help of co-relation to similar content or situation.
7. Prepare yearly, unit and daily Lesson plans.
8. Prepare achievement and diagnostic test on scientific basis.
9. Develop skills and abilities for organising school activities related to the subject.

Unit-I. Nature, Scope and Objectives

- Concept, Nature and Scope of Civics.
- Contemporary importance of Civics.
- Aims and Objectives of Teaching Civics at different level (Elementary, Upper Primary, Secondary and Senior Secondary).
- Co-relation of Civics to other subjects.
- Role of Civics in promoting international Understanding.

Role

Unit-II. Curriculum and planning.

- Meaning and concept of Curriculum.
- Fundamental principles of formulation of curriculum in Civics.
- Critical appraisal of the existing syllabus.
- Lesson Plan-Annual Plan, Unit plan and Daily lesson plan of teaching Civics.

Unit-III. Methods and approaches of Civics Teaching

- Various methods of teaching Civics (Project, Problem Solving, Supervised Study, Lecture, Discussion and Brain Storming)
- Innovative practices in Civics teaching.
- Field trip
- Mock Session

Univ-IV. Instructional Support System

- Community resources
- Teaching aid in Civics Teaching
- Techniques of interviewing

Unit-V. Evaluation of Civics teaching

- Purpose and concept of evaluation
- Objectives based evaluation
- Preparation of achievement test :
 - (i) Various types of question
 - (ii) Blue Print
 - (iii) Preparation of question paper

Sessional Work (20 Marks)

- (1) One test of 10 Marks
- (2) Any one of the following (10 Marks)
 1. Content analysis and preparation of instructional material related to any unit of subject related to Civics.
 2. Preparation of TV/Radio Script.
 3. Study of anyone aspect of Indian Political issues.
 4. Visit any local bodies as Panchayat, Municipality, Municipal Corporation and Nagar Nigam and prepare report about the functions of local bodies.
 5. Prepare a plan of Civics class room.
 6. Preparation of a plan for equipping a civics lab.
 7. Prepare five slides related to Civics teaching contents at Secondary level.
 8. Collection of news paper cutting related to Civics issues.

Bibliography/Book the study and reference:

1. Binning and Binning : Teaching of Social Studies in Secondary School, New York, Mc. Graw Hill Book Co. 1952.
2. Harlikar : Teaching of Civics in India, Bombay, Padma Publication Ltd.
3. Cray Ryland, W. : Education for Democratic citizenship.
4. Michaelies : Social Studies for children in a Democracy, New York, Prentice Hall Inc. 1956.
5. Bourne, H.E. : Teaching of History and Civics, Bombay, Longmans. 1972.

6. Tyagi, G.S.D. : Nagrik Shastra Ka Shikshan. Agra. Vinod Pustak Mandir.
7. Prescribed books of Board of Secondary Education for Higher Secondary Classes.
8. Ram Pal Singh : Nagrik Shastra Ka Shikshan

METHODOLOGY OF TEACHING HISTORY

Objectives : To enable the student teachers to :

1. Understand the concept, nature and scope of History.
2. Understand the nature of history as continuous process of development and change.
3. Understand the aims objectives of teaching history at different levels of the secondary stage.
4. Prepare unit plans, lesson plan and its related teacher aids.
5. Develop the syllabus for teaching history for different classes and its critical calculation.
6. Review the text book of history at the secondary level.
7. Understand the spirit and applying different methods and techniques of teaching history at the secondary stage.
8. Evaluate methodically the tools and techniques of evaluation at the different levels of secondary stage.

Unit-I Nature and Scope of the Subject

- Meaning nature and scope of history
- Importance of teaching history.
- Aims and Objective of teaching History at different levels
- Importance of studying Local History, National History and World History in the context of National Integration and International brotherhood and global citizenship.
- Co-relation of History with other school subjects.

Unit-II Curriculum and Planning

- Meaning and Concept of curriculum
- Fundamental principles of formulating curriculum in History and critical appraisals of the existing syllabus.
- Lesson plan—Annual Plan, Unit plan and Daily lesson plan of teaching History.
- Qualities and Professional growth of History teacher, his role in future prospective.

Unit-III Methods and Approaches

- Various methods of teaching History (Story Telling, Biographical, Dramatization Time Sense, Source, Project and Supervised study method).

Unit-IV Instructional Support System

- Audio Visual aids in teaching History
- Text book, teacher, co-curricular activities
- Community Resources; Computer, T.V.
- History room
- Planning of historical excursion
- Co-curricular activities.

Unit-V Evaluation

- Concept and Purpose of evaluation
- Objectives based evaluation.
- Tools and techniques of evaluation in history teaching
 - (i) Various types of question
 - (ii) Blue Print
 - (iii) Content analysis.

Sessional Work (20 Marks)

- (1) One test of 10 Marks.
- (2) Any one of the following 10 Marks.
 1. Content analysis and preparation of instructional material related to any unit of subject related to History.
 2. Study of analysis aspect of Historical issue and preparation of a report.
 3. Visit to any historical place and preparation of report.
 4. Collection of news paper cutting related to history issues.
 5. Developing a lesson plan based on new methods/techniques in history.

Bibliography/Book for study and reference :

1. Ghosh, K.D. : Creative teaching of History OUP 1951
2. Ghate, V.D. : Suggestions for the Teaching of History in India.
3. Hill, C.P. : Suggestions on the Teaching of History.
4. Johnson, H. : Teaching of History in Elementary and Secondary schools Macmillan.
5. Verjeshwary, R. : Handbook for History teacher in India.
6. NCERT : Handbook of History Teachers.
7. Choudhary, K.P. : Effective teaching of history in India, NECRT.
8. Gurusharan Tyagi : History Teaching, Raj. Hindi Granth Akadami, Jaipur
9. Baghela, Dixit : History Teaching, Raj. Hindi Granth Akadami, Jaipur
10. B.D. Ghate : History Teaching, Harayana Granth Akadami, Chandigarh

METHODOLOGY OF TEACHING ECONOMICS

Objectives : To enable the Student teachers to –

1. Refresh the knowledge about the Meaning, Importance, Nature, Scope and Aims of Economics.
2. Acquaint with the Aims, Objectives and value-outcomes through teaching Economics.
3. Develop ability to plan for suitable instructions in Economics.
4. Organize group-activities and project and to use various instructional strategies and methods for effective teaching of the subject
5. Establish correlation of Economics with other school-subjects.
6. Develop necessary skills to use various teaching aids, (Particular locally available material aids).
7. Develop skill to successfully use various evaluation techniques and to interpret the results.
8. Develop appropriate attitude towards the subjects and country's economy.

Contents

Unit-I Nature, Scope and objective.

1. Meaning, Nature, Scope of Economics.
2. Importance of Economics in School Curriculum.
3. Aims and Objectives of teaching Economics at different level.
4. Correlations of Economics with School Subjects

Unit-II Curriculum and planning

1. Concept and objectives of curriculum.
2. Fundamental Principles of formulation of Curriculum in Economics.
3. Critical Appraisal of the existing syllabus :
(a) Lesson Plan : Annual Plan, Unit Plan and Daily Lesson Plan of Teaching Economics.
4. Planning Outdoor activities

Unit-III Methods and Approaches to Teaching Economics

1. Various methods of teaching Economics—Project, Problem solving, Discussion, Analytic-Synthetic and Lecture Method.
2. Innovative Practices in Economics teaching—Brain Storming, work shop.

Unit-IV Instructional Support System

1. Use of Teaching aids in Economics.
2. Print and Non-Print media, community resources, Lab. And Museum.
3. Economics teacher and his qualities

4. Critical appraisal of Economics Text Book.

Unit-V Evaluation of Teaching Economics

1. Purpose and concept of evaluation.
2. Objective of based evaluation.
3. Preparation of achievement test :
 - (i) Various types of question
 - (ii) Blue Print
 - (iii) Preparation of question paper.

Sessional Work (20 Mark)

- (1) One test of 10 Marks.
- (2) Any one of the following (10 Marks.)
 1. Content analysis and preparation of instructional material related to any unit of subject related to Economics.
 2. Construction of objective type test items.
 3. Prepare five slides related to Economics teaching content at senior secondary level.
 4. Critical appraisal of Economics syllabus at senior secondary level.
 5. Preparation of 10 frames of linear or branching type programmes on any topic of Economics.

Bibliography :

1. Teaching of Social Studies in Secondary School : Bining and Bining.
2. Teacher's Manual in Economics : Dr. N. Hasen Published law, Regional College of Edu., Ajmer.
3. अर्थशास्त्र शिक्षण : रामपाल सिंह प्रकाशक-शब्द संचार, अजमेर।
4. अर्थशास्त्र शिक्षण : हरनारायण सिंह एवं राजेन्द्रपाल सिंह। प्रकाशक: लक्ष्मीनारायण अग्रवाल, आगरा।
5. अर्थशास्त्र शिक्षण : श्री शुक्ल प्रकाशक-नन्दकिशोर एण्ड ब्रदर्स, बनारस।
6. अर्थशास्त्र शिक्षण : डॉ. कामता प्रसाद पाण्डे।
7. अर्थशास्त्र शिक्षण : गुरुशरणदास त्यागी, विनोद पुस्तक मंदिर, आगरा।
8. अर्थशास्त्र शिक्षण : महेद्रपाल सिंह।
9. सूक्ष्म अध्ययन- डॉ. आर.पी. कथूरिया, विकास प्रकाशन, भोपाल।
10. सूक्ष्म अध्ययन : डॉ. आर.ए. शर्मा, माडर्न पब्लिशर्स, मेरठ।
11. अभिक्रमिक अध्यापन : तेला व श्रीवास्तव।
12. अर्थशास्त्र के सिद्धान्त : आनन्द स्वरूप गर्ग।
13. भारतीय अर्थशास्त्र के सिद्धान्त : पी.सी. जैन।
14. भारत का आर्थिक विकास : हरीशचन्द्र शर्मा व एन.आर. सिंह
15. अर्थशास्त्र के सिद्धान्त : सुंदरम् एवं वैश्य।

METHODOLOGY OF TEACHING GEOGRAPHY

Objectives—To enable student Teacher to :

1. Understand the Modern Concept of Geography.
2. Understand the Aims and Objectives of teaching Geography.
3. Prepare yearly plan, unit plan, lesson plan for different classes.
4. Prepare maps and charts to illustrate the contents of different classes and use them effectively.
5. Critically evaluate the existing school syllabus and review the text book of Geography.
6. Apply appropriate methods and techniques of teaching of particular topics at different levels.
7. Arrange field trips and local surveys.
8. Prepare achievement test and diagnostic test, administration of the test, analysis of results and make suggestion for remedial teaching.

Contents

I. Nature, Scope and Objectives :

- (a) Changing Concept of Geography—Practical Geography
- (b) Its place and scope (importance)
- (c) Aims and Objectives of Geography teaching at secondary level, its role in developing international understanding.
- (d) Correlation of Geography with social sciences, economics, Civics, Natural Sciences, Environmental Sciences.

II. Curriculum & Planning

- (a) Characteristics of a good Geography Curriculum
- (b) Critical Appraisal of Geography syllabus
- (c) Planning for daily lesson, yearly plan & Unit Plan
- (d) Geography Text Book
- (e) Qualities, role & Professional growth of Geography Teacher.

III. Methods & Approaches :

- (i) Regional method, Demonstration, Inductive Deductive, Project, Comparative, Lab. Method.
- (ii) Field trips, local & Regional Geography
- (iii) Other Innovative Practices—Programmed Learning, Computer, Geography Club, Geography Lab.

IV. Instructional support system :

- (a) Teaching aids lab equipment.
- (b) Geography room/Laboratory & Museums.
- (c) Resource material and use of local resources in teaching Geography.

(d) Co-Curricular activities.

V. Evaluation

(a) Tools Techniques of evaluation in Geography.

(b) Achievement Test :

(i) Different Types of Questions

(ii) Blue Print

(iii) Preparation of question paper

(iv) Diagnostic & Remedial teaching in Geography.

Sessional Work (20 marks)

(1) One test of 10 Marks

(2) Any one of the following: (10 Marks)

1. Preparation of maps, charts and models for physical Geography.
2. Develop two lesson plan based on new methods and approaches.
3. Critical Appraisal of Geography syllabus at secondary level.
4. Construction of objective type test items.
5. Collection of news paper cuttings related to Geographical issues.
6. Preparation of a report on visit some place of Geographical interest.

Bibliography

1. Source Book for Teaching of Geography, UNESCO Publication.
2. Singh L.R. Practical Geography, Allied Publications, Allahabad.
3. Monk House F.J. : Maps and Diagrams.
4. Verma J.P. : Bhugol Shikshan, Vinod Pustak Mandir, Agra.
5. Sharma, C.R. : Bhugol Shikshan, Vinod Pustak Mandir, Agra.
6. H.N. Singh : Bhugol Shikshan, Vinod Pustak Mandir, Agra.
7. Arora K.L. : Bhugol Shikshan, Praksh Bros. Ludiyana.
8. Barnard, H.C. : Principles and Practice of Geography Teaching, London University, Tutorial Press, 1953.
9. Kual, A.K. : Why and How of Geography Teaching Ambanu Publication, Srinagar, 1983.
10. Machee : Teaching of Geography, Oxford University Press, Bombay.
11. Mishra, A.N. : Bhugol Shikshan, Opadhathi Shikshan Niketan, Kanpur, 1959.
12. Verma O.P. and Vedanayagam E.G. : Geography Teaching Sterling Publishers, New Delhi, 3rd Ed., 1987.
13. Simpson, C.A. : The Study of Local Geography. Methuen.
14. Gopsil, G.H. : The teaching of Geography Macmillon & Co. Ltd. London, 1958.

METHODOLOGY OF TEACHING BOOK KEEPING AND ACCOUNTANCY

Objectives—To enable student Teacher to :

1. Acquire the Basic Understanding of teaching of Book-Keeping.
2. Develop the Ability to plan curriculum and instruction in Book-Keeping & accountancy at School level.
3. Develop the Ability to critically evaluate the existing school curriculum of Book Keeping & accountancy.
4. Impart knowledge of the methods and devices of teaching Book-Keeping and accountancy to develops the skill of using the same.
5. Apply appropriate methods in teaching particular topics for Book-Keeping & accountancy.
6. Prepare achievement and diagnostic test.
7. Develop necessary skills in preparation of using various teaching aids.

Contents

Unit-I

- (A) Meaning and Scope of Book-Keeping and Accountancy, its value and importance in social life.
- (B) Aims and Objectives of teaching Book-Keeping and Accountancy at Senior Secondary level.

Unit-II

Planning for teaching and role of teacher—

- (A) Unit Plan and Daily Lesson Plan.
- (B) Teacher role and attitude.
- (C) Maxims and principles of classroom teaching.

Unit-III

- (A) Journal teaching approaches of Book-Keeping and Accountancy.
 - (a) Journal Approach
 - (b) Ledger Approach
 - (c) Cash Book Approach
 - (d) Equation Approach
- (B) Various Methods of teaching Book-Keeping and Accountancy with special reference to modern methods of teaching, project, problem solving, Lecture-cum-demonstration and discussion methods.
- (C) Techniques and devices of teaching Book-Keeping and Accountancy.

Unit-IV

1. Principles and approaches of framing syllabus and its critical appraisal at Senior Secondary level.
2. Text Book-keeping and Accountancy—their importance, criteria for selection of text book, reference books and journals.

Univ-V

- (A) Evaluation of Students performande.
(B) Text Book-Keeping and Accountancy-their importance, criteria for selection of text book, reference books and journals.

Sessional Work (20 Marks)

- (1) One test of 10 Marks
(2) Any one of the following: (10 Marks)
1. Preparation of teaching aids.
2. Preparation and construction of a achievement test.
3. Preparation of a lesson plan based on any innovative method.

Bibliography

1. Verman A Musselma and J. Marshall Hannia : Teaching Book-keeping and Accountancy, Gregg Pub. Div., Mc Graw Hill Book Co., Inc. New York.
2. Williams : Principles of Teaching applied in Book-keeping and Accounts, Sir Isaac Pitman, London.
3. Selby : The teaching of Book-keeping.
4. Tonne, Pohem and Freeman : Method of teaching Business Subject, Gregg Pub. Dir., Mc Graw Hill Book Co., Inc. New York.
5. Harvey : Ways to teach Book-keeping and Accounting.
6. Aggarwal, J.C. : Teaching of Commerce.
7. Gupta and Gupta : Intermediate Book-keeping and Accounts, Agra Book Store, Agra (Hindi and English Version)
8. J.N. Vaish : Book-keeping and Accounts, Part I and II (Hindi and English version).
9. Parikh, Dr. A.K.M. : Lesson Planning in India Schools, Subha Sanchar, Ajmer.
10. Boynton Lewis D. Methods of teaching Book-keeping, South Western Publication Co., Cincinnati, Ohio.

METHODOLOGY OF TEACHING COMMERCE

Objective—To enable student Teacher to :

1. Help the students to acquire the basic understanding in the field of Commerce education.
2. Develop the ability to plan curriculum and instructions in Commerce at School Level.
3. Develop the ability to critically evaluate existing school syllabus and text book.

4. Impart knowledge about the methods and devices of teaching Commerce and to develop the skill of using the same.
5. Develop the ability of preparing an achievement test.
6. Develop Commercial efficiency among students.

Contents

Unit-I

- (a) Meaning, Nature and Scope of Commerce education.
- (b) Aims, objectives and values of teaching Commerce at Senior Secondary Level.
- (c) The place of Commerce in Education.

Unit-II

Methodology of teaching :

- (a) Unit Plan and Daily Lesson Plan
- (b) Maxims of Teaching
- (c) Classroom observation.

Unit-III

- (a) Modern methods of teaching Commerce.
- (b) Devices of teaching Commerce.
- (c) A critical estimate of the present syllabus in Commerce at Senior Secondary Level.

Unit-IV

Instructional material for :

- (a) Importance of proper equipment and material for effective instruction.
- (b) Criteria for selection of instructional material and equipment.
- (c) Different audio-visual equipment and material used in Commerce education.
- (d) Evaluation of text books in Commerce at Senior Secondary Level.

Unit-V

- (a) Qualities of Commerce teacher, Role and Professional growth of Commerce teacher.
- (b) Evaluation in Commerce: Importance, type of Tests-Essay, Short answer and objective type.

Sessional Work (20 Work)

- (1) One test of 10 Marks
- (2) Any one of the following : (10 Marks)
 1. Preparation of teaching aids. (Two)
 2. Preparation and construction of achievement test on any unit.
 3. Preparation of lesson plan based on any innovative method.

Bibliography

1. Rao, Seema : Teaching of Commerce, Anmol Publication Pvt.

- Ltd., 1995.
2. Jain KCS : Vanijaya Shikshan (Hindi) Central Academy, Jaipur, 1986.
 3. Gortside, L. : Teaching Business subjects. The Modern, Approach made and printed in Great Britain by the Garden Press Ltd., Letchworth, Hert Fordshire, year 1970.
 4. Neeb, W.B. : Modern Business Practice, The Ryerson Press, Toronto, 1965.
 5. Khan, M.S. : The Teaching of Commerce, Sterling Publishers (P) Ltd., Jullunder-3.
 6. Singh, I.B. : Vanijaya Ka Adhyayan, Laxmi Narayan Agarwal, Agra, 1968.
 7. Bhorali Devdas : Commerce Education in India, D.K. Publishers, Distributors (P) Ltd., New Delhi, 1988.
 8. Raj, B.C. : Method or Teaching Commerce, Prakashan Kendra, Lucknow, 1986.

METHODOLOGY OF HOME SCIENCE TEACHING

Objectives—To enable student Teacher to :

1. Understand the Nature and Importance of Home Science and its correlation with other subjects.
2. Understand Aims and Objectives of the subject.
3. Realise the essential unity between laboratory work and theoretical background of the subject.
4. Analyse school syllabus of the subject in relation to its applicability to practical situation and adaptability of the curriculum to local needs.
5. Utilize effectively the instructional material in teaching Home-Science.
6. Construct test items to measure objectives belonging to various cognitive levels.
7. Identify specific learning difficulties in Home-Science and to provide suitable remedial individual instructions to them.

Contents

Unit-I

- a. Nature and meaning of Home-Science.
- b. Values and importance of Home-Science for students of higher secondary stage.
- c. Correlation of Home-Science with other subjects.
- d. Aims and Objectives of Home-Science (Bloom's approach to specify the outcomes)

Unit-II

- a. Problem Solving Method
- b. Demonstration Method
- c. Experimental Method
- d. Project Method
- e. Lecture-Cum-demonstration Method
- f. Question-Answer Techniques
- g. Text Book
- h. Dramatization and Field Trips

Unit-III

- a. Concept of Planning for Home-Science Teaching.
- b. Various steps of Planning-Unit and lesson Planning.
- c. Importances and advantage for Planning of Unit and Lesson Plan.
- d. Qualities of a good Home-Science teacher.
- e. Role of Home-Science teacher.

Unit-IV

- a. Specific use of the following : Audio Visual aids in teaching of Home-Science.
- b. Laboratory (Location, Building)
- c. Charts
- d. Diagrams
- e. Black Board
- f. Reference books
- g. Graphs
- h. Radio
- i. T.V.
- j. Magazines
- k. Computer

Unit-V

- a. Concept, principles, basis and measures to improve a syllabus.
- b. Curriculum in Home-Science for different stages of school instruction.
- c. Concept of measurement and evaluation.
- d. Criteria of good evaluation.
- e. Merits and limitation of evaluation.
- f. Preparation of Blue-Prints Test.

Seesional Work (20 Marks)

- (1) One test of 10 Marks.
- (2) Any one of the following: (10 Marks)
 - a. Writing of any Essay on any topic based on the cotents of

the above units.

- b. Preparation of Visual-aid for solving community nutrition problems.

Reference Books :

1. शैरी.जी.पी. एवं शरण, डी.पी. गृह विज्ञान शिक्षण, विनोद पुस्तक मंदिर, आगरा।
2. अस्थाना, एस.आर. गृह विज्ञान का अध्यापन, लक्ष्मीनारायण अग्रवाल, आगरा।
3. Dass, R.R. and Ray, Binita. Teaching of Home-Science, Sterling Publisher Pvt. Ltd. New Delhi.
4. सुखिगा, एस.पी. एवं महरोत्रा, गृह विज्ञान, हरियाणा साहित्य अकादमी, चंडीगढ़।
5. शैरी, जी.पी. गृह प्रबंध व व्यवस्था।
6. अग्रवाल लक्ष्मीनारायण, गृह विज्ञान का अध्ययन।

METHODOLOGY OF TEACHING GENERAL SCIENCE

Objectives—To enable student Teacher to :

1. Understand the Nature, Scope values and Objectives of teaching Science at Secondary level.
2. Develop competence in teaching different topics of Science effectively.
3. Develop Scientific temper & provide teaching ^{in Scientific method} ~~inscientific method~~ of their student.
4. Use various methods with appropriateness of content, level and classroom situations to make pupil's learning meaningful.
5. Utilize the instructional material effectively in the teaching of Science.
6. Organise Co-curricular activities & practical work Science.
7. Use method most appropriate to asses the progress & achievement of the pupil & thus prepare appropriate test for the purpose.
8. Diagnose the gaps and misconception in learning Science and evolve remedial measures.

Contents

Unit-I Nature, Scope and Objectives

- A. Definition and Concept of Science.
- B. Place of Science in School Curriculum.
- C. Values of teaching Science at School level.
- D. Correlation Science with other subject.
- E. Objectives of teaching Sciences at Secondary level.

Unit-II Curriculum and Planning

- A. Principles of developing Science Curriculum at Secondary level.
- B. Factors affecting the selection and organisation of Science Curriculum.
- C. Unit Plan and lesson Plan.

- D. Qualities and responsibilities of Science teacher.
- E. Role of teacher in training students in Scientific method and developing creativity among students.

Unit-III Methods of approaches

- A. Lecture method, Demonstration, Lab. Method, problem solving, ~~Heuristic~~ Project method, Inductive & deductive method.
- B. Enquiry approach, programmed Instruction, Panel discussion, Team teaching, General & Workshop.

Unit-IV Instructional Support System

- A. Multi sensory aids—charts, models, Bulletin board, flannel board, Transparencies, Overhead Projector, Radio, T.V., Computer.
- B. Co-curricular activities—Organisation of Science club, Science fair and excursions, use of community resources.
- C. Science Lab. Planning & equipping Science Lab. Guidelines for organising practical work Care and maintenance of equipment, safety precautions for work in Science Lab.

Unit-V Evaluation

- (a) Evaluation : Concept, Types and Purposes.
- (b) Type of Test items : Objective type, S.A. & Essay type.
- (c) Planning objective based test items of different types.
- (d) Preparation of blue print and construction of Achievement test
- (e) Evaluation of practical work in Science.

Sessional Work-20 Marks

- (1) One test of 10 Marks
- (2) Any one of the following: (10 Marks)
 - 1. Life sketch and contribution of any one prominent Indian Scientist.
 - 2. Conducting and reporting two experiments useful at secondary level.
 - 3. Preparation of 10 frames of linear or branching type programmes on any topic of General Science.
 - 4. Construction and administration of a Diagnostic test on any one unit of General-Science :

Reference Books: ✓

<i>S.No.</i>	<i>Author</i>	<i>Year</i>	<i>Title & Publisher</i>
1.	Sood, J.K.	1987	Teaching Life Sciences, Kobl Publishers, Chandigarh.
2.	Sharma, L.M.	1997	Teaching of Science & Life Sciences, Dhanpat Rai & Sons, Delhi.

- | | | | |
|-----|---------------------------|------|--|
| 3. | Kulsherstha, S.P. | 1988 | Teaching of Biology, Loyal Book Depot, Meerut. |
| 4. | Yadav, K. | 1993 | Teaching of life Sciences, Anmol Publishers, Daryaganj, Delhi. |
| 5. | Yadav, M.S. | 2000 | Modern Methods of Teaching Sciences, Anmol Publisher, Delhi. |
| 6. | Singh, U.K. & Nayab, A.K. | 2003 | Science Education Commonwealth Publishers, Daryaganj, New Delhi. |
| 7. | Venkataih, S. | 2001 | Science Education in 21st Century, Anmol Publishers, Delhi. |
| 8. | Yadav, M.S. (Ed.) | 2000 | Teaching Sciences at High level, Anmol Publishers, Delhi. |
| 9. | Edger, Marlow & Rao, D.B. | 2003 | Teaching Science successfully, Discovery Publishing House, New Delhi. |
| 10. | Mangal, S.K. | 1996 | Teaching of Science, Alya Book Depot, New Delhi. |
| 11. | Dave, R.H. | 1969 | Taxonomy of Educational Objectives & Achievement, testing London University Press, London. |
| 12. | Sood, J.K. | 1989 | New Direction in Science Teaching, Kohli Publishers Chandigarh. |
-

METHODOLOGY OF TEACHING CHEMISTRY

Objectives—To enable student Teacher to :

1. Understand the Nature, Place, Values and Objectives of teaching Chemistry at Secondary/Senior Secondary level.
2. Establish its correlation with other subjects.
3. Evaluate critically the existing syllabus of Chemistry prescribed for Secondary/Senior Secondary level in the State of Rajasthan.
4. Develop yearly plan, unit plan and lesson plan for Secondary/Senior Secondary classes.
5. Provide training in Scientific method and develop Scientific temper among their students.
6. Use various methods and approaches of teaching Chemistry.
7. Acquire the ability to develop instructional support system.
8. Plan and organize chemistry practical work in the Laboratory.

9. Organise Co-curricular activities and utilize community resources for promoting Science learning.
10. Use method most appropriate to assess the progress and achievement of the pupil & thus prepare appropriate test for the purpose (both theoretical & practical).

Contents

Unit-I Nature, Scope and Objectives

1. Nature of Science with special reference to Chemistry.
2. History of Chemistry with special reference to India.
3. Place & values of teaching Chemistry at Secondary/Senior Secondary level.
4. Correlation of Chemistry with other subjects.
5. Objectives of teaching chemistry at Secondary/Senior Secondary level.

Unit-II Curriculum and Planning

1. Principles of developing Chemistry Curriculum at Secondary/Senior Secondary level.
2. Modern trends in Chemistry Curriculum : CBA, CHEM Study, NUFFIELD-O & A level.
3. Critical appraisal of Chemistry syllabus at Secondary/Senior Secondary level prescribed by Board of Secondary Education, Rajasthan.
4. Planning Daily lesson plan, unit plan & yearly plan.
5. Qualities & responsibilities of Chemistry teacher.
6. Teacher's role in training students in scientific method and in developing creativity and Scientific temper among learners.

Unit-III Methods and approaches

1. Lecture method, Demonstration method, Lab based methods, Inductive & Deductive method, problem solving, Heuristic & Project method
2. Inquiry approach programmed instruction, Group discussion, self study, Team teaching, CAL, Seminars & Workshops.

Unit-IV Instructional Support System

1. Multisensory aids : Charts, models, Flannel Board, Transparencies, OHP, Radio, T.V., Computer.
2. Co-curricular Activities : Organisation of Science club, Science fair and visits to places of Scientific interest.
3. Chemistry Lab : Layout Plans, equipments, furniture, maintenances of records, repair, care and improvisation of apparatus, safety measures in Lab, Organisation of Practical work

4. Role of State & National Level Instructions & Laboratories Like DST, NCL, Fertilizer, Pesticide & Chemical Companies like Hindustan Zinc Ltd.
5. Characteristics of a good text book and evaluation of a Text Book.

Unit-V Evaluation in chemistry

1. Evaluation : Concept, Types and Purposes.
2. Type of test items and their construction.
3. Preparation of Blue Print & Achievement Test.
4. Diagnostic Testing & Remedial teaching.
5. Evaluation of practical work in Chemistry.

Sessional Work (20 Marks)

- (1) One test of 10 Marks
- (2) Any one of the following: (10 Marks)
 1. Life sketch & contribution of any one prominent Indian Chemist.
 2. Preparation of scrap book containing original Science (Scientific cartoon) Stories/articles/features/plays/Interview report useful for teaching of Chemistry.
 3. Planning an out of class activity to use local environment to teach chemistry.
 4. Conducting & reporting two experiments useful at Secondary/Senior Secondary level (other than those in syllabus).
 5. Description & designing of any Improvised apparatus.
 6. A critical study of any one Senior Secondary Lab of Chemistry.
 7. Preparation of 10 frames of Linear or Branching type programmes on any topic of Chemistry.
 8. Preparation of Radio or T.V. script.

Reference Books:

<i>S.No.</i>	<i>Author</i>	<i>Year</i>	<i>Title & Publisher</i>
1.	Yadav, M.S.	1995	Teaching of Chemistry, Anmol Publication, New Delhi.
2.	Negi, J.S. & Negi, Rajita	2001	Teaching of Chemistry.
3.	Yadav, M.S.	2000	Teaching Science at Higher Level, Anmol Publication, New Delhi.
4.	Misra, D.C.		Chemistry Teaching Sahitya.
5.	Kherwadkal, Anjali	2003	Teaching of Chemistry by Modern Method. Sarup & Sons.

			New Delhi.
6.	Das, R.C.	1985	Science Teaching in Schools, Sterling Publishers Pvt. Ltd. New Delhi.
7.	Venkataih, S.	2001	Science Education in 21st Century, Anmol Publishers, New Delhi.
8.	Rao, D.B.	2001	World Conference on Science Education, Discovery Publishing House, New Delhi.
9.	Singh, U.K.	2003	Science Education, Common Wealth Publishers, Daryaganj, New Delhi.

METHODOLOGY OF TEACHING BIOLOGY

Objectives—To enable student Teacher to :

1. Understand the Nature, Place, Values and Objectives of teaching Biology at Secondary level.
2. Establish its Correlation with other subjects.
3. Evaluate critically the existing syllabus of Biology prescribed for Secondary/Senior Secondary level in the State of Rajasthan.
4. Develop yearly plan, unit plan and lesson plan for Senior Secondary classes.
5. Provide training in Scientific method and develop Scientific temper among their students.
6. Use various methods and approaches of teaching Biology.
7. Acquire the ability to develop instructional support system.
8. Plan and organise Biology practical work in the Laboratory.
9. Organise Co-curricular activities and utilize community resources for promoting Science learning.
10. Use method most appropriate to assess the progress and achievement of the pupil & thus prepare appropriate test for the purpose (both theoretical & practical).

Contents

Unit-I Nature, Scope and Objectives

1. Nature of Science with special reference to Biology.
2. Main discoveries and development in Biology.
3. Place & values of teaching Biology at Secondary/Senior Secondary level.
4. Correlation of Biology with other subjects.
5. Objectives of teaching Biology at Secondary/Senior Secondary level.

Unit-II Curriculum and planning

1. Principles of Biology curriculum at Secondary/Senior Secondary level.
2. Modern trends in Biology Curriculum : B.S.C.S., Chem Study, Nuffield-O & A level.
3. Critical appraisal of Biology syllabus at Secondary/Senior Secondary level prescribed by Board of Secondary Education, Rajasthan.
4. Planning Daily lesson plan, unit plan & yearly plan.
5. Qualities & responsibilities of Biology teacher. Teacher's role in training students in Scientific method and in developing creativity and Scientific temper among students.

Unit-III Methods and approaches

1. Lecture method, Demonstration method, Lab based methods, Inductive & deductive method, problem solving, Heuristic & Project method.
2. Inquiry approach, programmed instruction, Group discussion, self study, Team teaching, computer assisted learning, seminars and workshops.

Unit-IV Instructional Support System

1. Multi sensory aids : Charts, models, specimen, bulletin-boards, flannel Board, Transparencies, slides, projector, OHP, Computer, T.V. Radio etc.
2. Co-curricular Activities : Organisation of Science club, Science fair trips and use of community resources.
3. Biology Lab : Organisation of Biology Laboratory, Arrangement of Apparatus, Care & Maintenance of equipment & specimen, organisation of practical work in Biology.
4. Role of State & National Level Institutions & Laboratories Research Centers in Botany, Zoology & Agriculture.
5. Characteristics of a good text book and Evaluation of a Text Book.

Unit-V Evaluation in Biology

1. Evaluation : Concept, Types and Purposes.
2. Type of test items and their construction.
3. Preparation of Blue Print & Achievement Test.
4. Evaluation of practical work in Biology.

Sessional Work : (20 Marks)

- (1) One test of 10 Marks.
- (2) Any two of the following: Each 5 Marks-10 Marks.
 1. Life sketch & contribution of anyone prominent Indian Biologist.

2. Preparation of Herbarium (scrap book)
3. Prepare any one of the following related to environment education :
(i) poster (miniature), (ii) Article, (iii) Story, (iv) Play.
4. Description of any two teaching models.
5. Prepare a Radio or T.V. Script.
6. Make a list of local (resources useful in teaching Biology and prepared lesson plan using some of them.
7. A case study of any one Senior Secondary lab of Biology.
8. Preparation of 10 frames of Linear or Branching type programmes on any topic of Biology.
9. Construction and administration of Diagnostic test on any one unit of Biology.

Reference Books:

<i>S.No.</i>	<i>Author</i>	<i>Year</i>	<i>Title & Publisher</i>
1.	Sood, J.K.	1987	Teaching Life Sciences, Kohli Publishers, Chandigarh.
2.	Sharma, L.M.	1977	Teaching of Science & Life Sciences, Dhanpat Rai & Sons, Delhi.
3.	Kulshrestha, S.P.	1988	Teaching of Biology, Loyal Book Depot.
4.	Yadav, K.	1993	Teaching of Life Sciences, Anmol Publication, New Delhi.
5.	Yadav, M.S.	2000	Modern Method of Teaching Sciences, Anmol Publication, New Delhi.
6.	Singh, U.K.	2003	Science Education Common Wealth Publishers, Daryaganj, New Delhi.
7.	Venkataih, S.	2001	Science Education in 21st Century, Anmol Publication, New Delhi.
8.	Yadav, M.S. (Ed.)	2000	Teaching Science at Higher Level, Anmol Publication, New Delhi.
9.	Eger, Marlow & Rao, D.B.	2003	Teaching Science successfully, Discovery Pub. House, New Delhi.
10.	Mangal, S.K.	1996	Teaching of Science, Arya Book Depot, New Delhi.
11.	Dave, R.H.	1969	Taxonomy of Educational Objectives & Achievement

Testing. London University Press.
London.

12. Sood, J.K. 1989 New Direction in Science Teaching, Kohli Publishers, Chandigarh.
-

METHODOLOGY OF TEACHING PHYSICS

Objectives—To enable student Teacher to :

1. Understand the Modern Concept of Physics.
2. Understand Aims and Objectives of teaching Physics.
3. Appreciate the contribution of eminent physicists in connection with the development of physics.
4. Plan curriculum at Secondary and Senior Secondary level.
5. Analyse the Syllabus of the subject in relation to its applicability to practical situations.
6. Develop scientific attitude and provide a training to scientific method to their students.
7. Write the objectives in behavioural terms, analyse the content and be skills in concept formation.
8. Develop unit and lesson plan.
9. Use various methods and teaching aids with appropriateness of content, level and classroom situation.
10. Plan and organise Physics practical in the laboratory.
11. Organise co-curricular activities related to Physics.
12. Use methods most appropriate to assess the progress and achievement of the pupils using variety of tools and techniques for Physics theory and practical.
13. Diagnose the gaps and misconception in learning Physics and take remedial measures.

Contents

Unit-I Nature, Scope and Objectives

1. Nature of Science Physics as a fundamental science.
2. Major milestones in the development of Physics.
3. Contribution of Indian Physicists, C.V. Raman, M.N. Saha, K.S. Krishnan, Narlekar, J.C. Bose, S.N. Bose, H.J. Bhabha and S. Chandra Shekhar.
4. Objectives and values of Teaching Physics at Senior Secondary Level.

Unit-II Curriculum and planning

1. Principles of selection and organisation of course, content and experiences for senior secondary level Physics curriculum and characteristics of good Physics curriculum.

2. Correlation of Physics with other school subjects and its role in daily life
3. Writing of objectives in behavioural terms, content analysis, developing yearly unit and daily lesson plan and concept mapping.
4. Teacher's role in planning for developing scientific attitude and creativity among students and for training them in scientific method.

Unit-III Methods and approaches

1. Demonstration method, laboratory method, project method, problem solving method and assignment method.
2. Heuristic approach, Inductive deductive approach.
3. Out of class activities like science club, science fairs and field trips.

Unit-IV Instructional Support System

1. Physics Laboratory-Planning, Equipping and Organizing practical work.
2. State and National level institutions and laboratories (DST, NPL, ISRO, CEERI, RAPS and BARC)
3. Community resources like Science Centres/museums, planetarium and solar observatory.
4. Multisensory aids : chart, models, over-head projector, computer and internet, improvised apparatus.
5. Text books—Characteristics of a good text book and evaluation of text book.

Unit-V Evaluation

1. Type of test items and their construction.
2. Preparation of blue print and achievement test.
3. Diagnostic testing and remedial teaching in Physics.
4. Evaluation of practical work.

Sessional Work (20 Marks)

- (1) One test of-(10 Marks)
- (2) Any one of the following: (10 Marks)
 1. Case study of one senior secondary lab of Physics.
 2. Description of design of any improvised apparatus.
 3. Planning an out of class activity to use local resources to teach Physics
 4. Life sketch and contribution of one Physicist.
 5. Preparation of scrap book containing original science (scientific cartoon) / stories / latest articles / feature / play / interview report useful for teaching Physics.

Reference Books :

1. Heiss, Oburn and Hoffman : Modern Science "The Macmillan Company", New York, 1961.
2. Thurber W. and A. Collette : Teaching Science in Today's Secondary Schools, Boston Allyn and Bacon Inc. New York, 1959.
3. मंगल, एस.के. : साधारण विज्ञान शिक्षण, आर्य बुक डिपो, नई दिल्ली, 1996
4. Vaidya, N. "The impact of science Teaching", Oxford and IBH Publishing Company, New Delhi, 1971.
5. Richardson, S. : "Science Teaching in Secondary School". Prentice Hall, USA 1957.
6. Sharma, R.C. and Sukla : "Modern Science Teaching", Dhanpat Rai and Sons, Delhi, 2002.
7. त्यागी एस.के. : भौतिक विज्ञान शिक्षण, साहित्य प्रकाशन, आगरा-2000
8. Ravi Kumar S.K. : "Teaching of Science" Mangal deep Publication, 2000.
9. Rao Aman : Teaching of Physics, Anmol Publication, New Delhi, 1993.
10. Wadhwa Shalini : "Modern Methods of Teaching Physics" Sarup and Sons, New Delhi, 2001.
11. Prasad Janardan : "Practical Aspects in Teaching of Science", Kanishka Publisher, New Delhi, 1999.
12. भटनगर, ए.बी. : भौतिक विज्ञान शिक्षण, आर.लाल बुक डिपो, मेरठ, 2000
13. निगम डी.एस. : विज्ञान शिक्षण, हरियाणा साहित्य अकादमी, चण्डीगढ़, 1990.
14. Nanda V.K. : "Science Education Today" Anmol Publication, New Delhi, 1997.
15. Kumar Amit : "Teaching of Physical Science" Anmol Publication, New Delhi, 1997.
16. नेगी, जे.एस. व नेगी रक्षिता : भौतिकी शिक्षण, विनोद पुस्तक मंदिर, आगरा, 1999.

METHODOLOGY OF TEACHING MATHEMATICS**Objectives :**

1. To enable pupil teachers to understand and appreciate mathematical structure and their isomorphism with physical realities.
2. To improve their understanding of the basic concepts and make them appreciate their unifying strength and wide of applicability.
3. To enable the student teacher, to have a clear idea of the plan of mathematics in school curriculum and of its relation with the objectives of general education.

4. To enable them to analyse the school syllabus of mathematics in relation to its objectives.
5. To enable them to see meaningfulness of the school mathematics programme in relation to life situations.
6. To give them competence in teaching **different topics** effectively.
7. To enable them to check up the **results of their teaching** against the objectives and their valid criteria.
8. To enable them to devise and suitably use **aids for teaching** so that it may result in better learning.
9. To enable them to use various techniques and **practices in the classroom** to make pupil learning lasting and meaningful.
10. To enable them to organise co-curricular activities in **mathematics**.
11. To enable them to enrich and refresh **their knowledge of content** in Mathematics.

Notes :

1. The questions on the units such as methods of teaching aids in teaching, Unit and lesson planning, objective and evaluation will be based on the Unit I.
2. The question on unit I will not be asked directly without any reference to Methodology.
3. The unit I may be discussed by **adopting** any suitable methodology such as use of library assignments, discussions etc.

Contents

Unit-I

Diagnostic, Remedial and Enrichment programmes with respect to the following content areas :

- (a) Set theory and Mathematical structures-sets, Relations and Functions. An elementary idea of Boolean algebra and numbers with different bases.
- (b) **Statistics** : Graphical representation of the statistical data. Measures of central tendency, dispersion and coefficient of correlation.
- (c) Axiomatic development of Geometry : Concepts of line, ray, line segment, angle, triangle, interior and exterior of angles and triangles. Concepts of equality, congruency and similarity.
- (d) Any other topic from the prevailing syllabi at upper primary, secondary and higher secondary stages in the state.

Unit-II

- (a) The nature of Mathematics, **Importance** of Mathematics in the Secondary school Curriculum, **History** of Mathematics and

contribution of Indian Mathematicians. Meaning of **Mathematics** according to the following schools of thought :

- (i) Logistic (ii) Institutionists, (iii) Formalists
 (b) **Aims and Objectives of teaching mathematics.** Introduction to Blooms Taxonomy of education and educational objectives in relation to knowledge, understanding, application and skills.

Unit-III

- (a) **The Mathematics, Curriculum, Strategy and Principles of curriculum construction** for the secondary level. Recent trends in mathematics curriculum, Critical evaluation of existing mathematics curriculum, Critical evaluation of existing mathematics curriculum prescribed by Rajasthan Board of Secondary Education at different levels.
 (b) **Unit and Lesson planning.**
 (c) **Methods of teaching :**
 (i) Analytic and Synthetic (ii) Inductive Deductive
 (iii) Demonstration : Laboratory (iv) Heuristic and project
 (v) Problem solving.

Unit-IV : Aids in Teaching and their proper use :

- (a) **Mathematics room (Planning and Equipment)**
 (b) **Text Books**
 (c) **Audio Visual aids, film strips, field trips and excursion Mathematics Association, work-book.**
 (d) **The Mathematics Teacher—Academic and professional preparation.**
 (e) **Journal and reference books on Mathematics teaching.**

Unit-V Evaluation in Mathematics :

- (a) **Concept of evaluation, distinction between evaluation and examination. It is characteristics and functions.**
 (b) **Formulation of objective, learning experience.**
 (c) **Preparation and use of tests for evaluation such as achievement tests, diagnostic test, aptitude tests, observation schedules etc.**

Sessional Work : 20 Marks

- (1) **One test of-10 Marks**
 (2) **Any one of the following: 10 Marks**
 1. **Make a Diagnostic, Remedial and enrichment programmes of set theory and mathematical structures.**
 2. **Preparation and construction of an achievement test based on any unit.**
 3. **Preparation of a lesson plan based on any Innovative method.**

4. Preparation of 10 frames of linear or Branching type programmes on any topic of Mathematics.

Bibliography

1. Agarwal S.M. : Teaching of Modern Mathematics, Dhanpat Rai and Sons, Delhi.
2. Ryangar and Kuppaswami, N.A. : Teaching of Mathematics in the new education Universal Publication.
3. Butler and Wren : The Teaching of Secondary Mathematics, McGraw Hill Book Company.
4. Jagadguru Swami : Sri Bharti Krishna Tirthji Vedic Mathematics, Moti Lal Banarsidas Publisher, Delhi.
5. Kapur, J.N. : Modern Mathematics for Teachers, Arya Book Depot, New Delhi.
6. Mangal, S.K. : Teaching of Mathematics, Prakash Brothers, Ludhiana.
7. Sidhu, K.S. : Teaching of Mathematics, Prakash Brothers, Ludhiana.
8. श्रीवास्तव एवं भटनागर; गणित शिक्षण, रमेश बुक डिपो, जयपुर
9. Shanti Narayan, Modern Abstract Algebra, S. Chand & Co. New Delhi.
10. Kapoor and Saxena : Mathematical Statistic, S. Chand & Co. New Delhi.

PAPER VII : COMPUTER LITERACY & EDUCATIONAL APPLICATION

Objectives :

1. The student teachers will have understanding of Computer System and its working.
2. The student teachers will be able to understand and operate Windows.
3. The student will develop skill in using Windows and the applications.
4. The student will be able to understand the Educational Applications of Computer.
5. The students will develop positive attitude towards handling of computers.
6. The students will develop skills in the use of Internet.

Course Content

Unit-I

Computer Fundamentals

1. General awareness about functioning of Computer :
(a) Characteristics and uses of Computer. (b) Block diagram of Computer.
(c) Classification of Computer.
2. Concept of hardware and software.
3. Input/Output devices keyboard, Mouse, Monitor, Printer.
4. Storage devices (Secondary)-Hard disk, Floppy disk, CD-ROM, ZIP.
5. Computer memory and its units-RAM, ROM, bit and byte.

Unit-II

Operating System

1. Basic features of Windows
2. 'Windows' and its accessories
(a) Explorer, (b) File Manager, (c) Managing Printing

3. MS-Office

- (a) MS-Word-Text Management, (b) MS-Excel- To support database and graphics, (c) POWER POINT-Preparation of Slides

Unit-III

Internet and Multimedia

1. Server, Modem, E-Mail, Internet Surfing for educational purpose websites, Search Engineers.
2. Concept of Multimedia and its educational uses.

Unit-IV

1. Computer as teaching machine :

- (a) Computer Aided Instruction (CAI)-Concept and modes
(b) Concept of other terms like CMI (Computer Managed Instructions). CBI (Computer Based Instructions), CALT Computer Assisted Learning and Teaching).

Unit-V

1. Information Technology and Computer (Concept, role, impact on education system).
2. Role of Computer in Education System (e.g. Library Management, Educational Management and Research School Management, Evaluation Distance Education, Education of special Children etc.)

Unit-VI

Communications and Networks : Connectivity, The Connectivity, The wireless revolution, Communication systems, Communication Channels, Physical connections, wireless connections, Infrared, Broadcast radio, Microwave, Satellite, GPS, Connection Devices, Modem, Connection service, types of connections, Data Transmission, Bandwidth and its categories, Protocols, Networks, Specialized terms in computer network, Network types, LAN, MAN, WAN, Home Network, Network Architecture, topology, star topology, ring topology, bus topology, hybrid network, network strategies, terminal network system, Client Server network systems, peer to peer network systems, Organizational internets : Intranets and Extranets, Firewalls

Practicals and sessional Work (any two)

1. Preparation of Mark-sheet and Question Bank.
2. Preparation of instructional material/course ware (based on content analysis to be used as transparencies/charts using MS-Word/Power Point.
3. Preparation of marks register of a class and its statistical analysis and graphical presentation.

Evaluation

1. Theory paper of 50 marks
 2. Practical evaluation
Practical exam - 20 marks
Submission of report - 10 marks + (one test 10 marks)
Viva - 10 marks
- Total - 50 Marks

References :

1. Reghavan, S.S. (1986) 'Micro Computer in Science and Language teaching', Mysore R.C.E.
2. Osborne, A (1982), 'An Introduction to Micro Computers', Galgotia Book Source, New Delhi.
3. कौर, हरजीत (1993); 'कम्प्यूटर-एक परिचय', पीताम्बर पब्लिशिंग कम्पनी प्रा. लि., नई दिल्ली
4. वैकटाचमल, एम; 'कम्प्यूटर एक परिचय', पीताम्बर पब्लिशिंग कम्पनी प्रा. लि., नई दिल्ली
5. Balamurali, Sawtha '(1996); 'An Introduction to Computer Science'. Vikas Publishing House. Pvt. Ltd., New Delhi.
6. Payal Lotia and Pradeep Nair - 'Computer-An Introduction'. BPI3 Publication. New Delhi-110001.

PAPER VIII

EDUCATIONAL AND VOCATIONAL GUIDANCE

Objectives : To enable the student teachers to :

1. Understand the basic Concept, Nature and Scope of educational Vocational Guidance.
2. Understand the Aims and Objectives of Educational and Vocational Guidance.
3. Understand the Importance of Educational and Vocational Guidance in the present national scenario.
4. Understand the Role and Responsibilities of guidance workers in School.
5. Understand the Nature and Types of guidance services with reference to School Education.

Contents

Unit-I Concept, Nature and Scope of Guidance

Importance of guidance in the lives of individuals, meaning of guidance. Distinction between guidance and counselling.

Unit-II Importance of Guidance

Philosophy and Aims of Guidance. Importance of Guidance in Schools for individuals and for society.

Unit-III Areas of Guidance

Areas of Guidance, Educational Guidance, Vocational Guidance, Personal Guidance, Development Guidance, Psychology of Careers, Concept of Vocational development and Careers Patterns.

Unit-IV Guidance in Present Context

Guidance Implications in the current Indian Scenario, Education and Guidance Democracy and Guidance, Individual Difference and Guidance.

Unit-V Guidance Services

Introduction to Guidance Services : Individual Inventory Service Cumulative Record, Information Service, Follow up service, Group Guidance Service. Guidance in the School Programme Role & Responsibilities of Guidance worker in Schools.

Sessional Work : (20 Marks)

- (1) One test of 10 Marks
- (2) Any one of the following: (10 Marks)
 - (i) Evaluation an Educational Programme Guidance and Curriculum Approach.
 - (ii) Write one essay and two abstracts.

Books Recommended

- (i) Erickson, Clifford E. : A Basic Tent for Guidance Workers. N.Y. Prentice. Hill Inc. 1947.
- (ii) Forelich Clifford P. : Guidance Services in Smaller Schools New York McGraw Hill Book Co. 1950

- (iii) Hoppock : Group Guidance, Principles, Techniques and Evaluation.
- (iv) Strang. Ruth : The Role of Teacher in Personnel work, New York Teachers College, Columble University, 1933.
- (v) Super, Donald : Appraising Vocational Fitness New York, Harper and Brothers, 1947.

METHODOLOGY OF SCHOOL LIBRARY ORGANISATION

Objectives : To enable the student teachers to :

1. Know and understand the basic Concepts in School Library Organisation.
2. Know and understand the Aim and Objectives of School Library Organisation.
3. Know, understand and use the Principles and Methods of School Library Organisation.
4. Know, understand and use the Techniques of Classification.

Contents

Unit-I

- (a) Five Law's of Library Science
- (b) Library in Education
- (c) Library Equipment
- (d) Library Furniture

Unit-II

- (a) Aims and Objects of School Library
- (b) Planning of Library Building
- (c) Class Library and Subject Library.

Unit-III

- (a) Organisation and Administration of School Library
- (b) Issue Methods
- (c) Brown Charging System
- (d) Network Charging System
- (e) Book Selection

Unit-IV

- (a) Catalogue : Meaning, Aims and Functions of Catalogue
- (b) Library Rules
- (c) Stock Verification

Unit-V

- (a) Catalogue : Meaning, Aims and Functions of Catalogue
- (b) Types of Catalogue : Physical Form
- (c) Accession Register
- (d) Reference Service : Meaning, Need and Function of Reference Service.
- (e) Types of Reference Service.

Sessional Work : (20 Marks)

- (1) One test of-10 Marks
- (2) Any one of the following: (10 Marks)

1. One Essay
2. Survey of School Library and preparation of a report.
3. Classification of 25 Books by Dewey-Decimal classification Scheme of 18th Edition.
4. Simple cataloging of Five Books by Ranganathan "Classified Catalogue Code".

Bibliography

3. Ranganathan, S.R. : Pustakalya Vigyan Ke Panch Sutra. Rajasthan. Hindi Granth Academy, Jaipur 1980.
4. Shukla, Lalita S : Basic of Library Science, Metropolitan Book Co., Delhi.
5. Ranganathan, S.R. : Library Manual, Asia Publishing House, Bombay, 1960.
6. Fargo, L.F. : School Pustakalaya Ke Vividh Roop. Atama Ram and Sons, Delhi, 1966.
7. Shastri, D.P. : Pustakalaya Vargikaran, Sahitya Bhawan, 1974.
8. Tripathi, S.M. : Adhunik Granthalaya Vargikaran, Shri Ram Mehta & Co, Agra, 1976.
9. Bhargava, G.D. : Granthalaya Vargikaran, Madhya Pradesh Hindi Granth Academy, Bhopal, 1971.
10. Agarwal, S.S. : Catalogue Entries and Procedure, Lakshmi Book Store, New Delhi, 1972.
11. Agarwal, S.S. : Suchikaran Ke Siddhant.
12. Giraj Kumar and Kumar, C : Suchikaran Ke Siddhant, Vikas Publishing House, New Delhi, 1976.
13. Ranganathan, S.R. : Library Administration, Asia Publishing House, Bombay.
14. Mittal, R.L. : Library Administration Theory and Practice, Metropolitan Book Co., Delhi-6, 1973.
15. Banarjee, P.R. : Library Administration Vyavasthapan, Madhya Pradesh Hindi Granth Academy, Bhopal.
16. Shrivastava and Verma : Pustakalaya Sangathan Avam Sanchalan, Rajasthan Hindi Granth. Academy, Jaipur.
17. Kanti, M : Pustakalya Vigyan Nirgam Paddhatiya, Chaitanya Prakashan, Kanpur.
18. Sundeshvaran, K.S. : Sandarbh Seva, Madhya Pradesh Hindi Granth Academy Bhopal.
19. Dewey, Melvil : Dewey Decimal Classification. Edition IS, Forest Press, New Delhi.

METHODOLOGY OF TEACHING MEASUREMENT AND EVALUATION

Objective : Student Teacher will be able to understand :

1. The meaning of Measurement and Evaluation.
2. Recall the relationship between Measurement and Evaluation.
3. The preparation of objective type test items.
4. The meaning of Intelligence, Interest, Personality and Creativity.
5. Development of standardized and teacher made test.
6. Analyse the statistical methods.
7. Use techniques of Evaluation.

Contents

Unit-I

- (a) Meaning of Measurement and Evaluation.
- (b) Relationship between Measurement and Evaluation.
- (c) Significance of Educational Measurement and Evaluation.
- (d) Techniques of Evaluation.

Unit-II

- (a) Examination and how to improve it.
- (b) Preparation of objective type test items.
- (c) Item analysis.

Unit-III

- (a) Measurement of Intelligence
- (b) Measurement of Interest
- (c) Measurement of Personality
- (d) Measurement of Creativity.

Unit-IV

- (a) Standardized versus Teacher made test.
- (b) Constructing an achievement test.
- (c) Characteristic of Good Evaluation System.
 - (a) Reliability
 - (b) Validity
 - (c) Objectivity
 - (d) Comparability
 - (e) Practicability

Unit-V

- (a) Frequency distribution
- (b) Measures of Central Tendency
- (c) Standard Deviation
- (d) Co-efficient of co-relation : Product Moment and Rank Difference.

Sessional Work : 20 Marks

- (1) One test of 10 Marks
- (2) Any one of the following: (10 Marks)
 - A detailed essay on any aspect of measurement and Evaluation.

- Construction administration and item analysis of a test in any school subject.

Bibliography

1. Agarwal, Y.P. (1990) : Statistical Methods. Sterling Publishers Pvt Ltd. Delhi.
2. Asthana, Dr. Bipin Agarwal, Dr. R.N. (1983) : Measurement and Evaluation in Psychology and Education. Vinod Pustak Mandir. Agra-2
3. Anastasi, A. (1968) : Psychological Testing (3rd Edition) New York.
4. Fergusan, George, A. (1971) : Measurement and Evaluation in teaching . MacMillan Co. Fourth Printing, New York.
6. Numally Jum, C. (1964) : Educational Measurement and Evaluation. McGraw. Hill Book Company. New York.

ENVIRONMENTAL EDUCATION

Objectives : To enable the pupil Teachers to :

1. Understand the concept of Environment and the problems concerning Environment through multi disciplinary approach.
2. Develop environmental consciousness in their students.
3. Develop the skills of planning and organising Ecological activities in the schools so that the children can be equipped to play their role in protection and enrichment of environment.
4. Use different techniques and material for the effective dissemination of Environmental information.
5. Conduct local surveys, arrange field trips and Environmental games and related activities.

Contents

Unit-I

1. Concept of Environment.
2. Concept of Ecology, Ecosystem, Components of Ecosystem and interdependence.
3. Relationship of man and Environment.
4. Personal & family responsibility about the Environment.

Unit-II

Problems of Modern Civilization :

1. Population Explosion.
2. Pollutions-Air, Water, Noise, Waste and Cultural
3. Deletion of Natural resources : Causes and measures for conservation of forests and wild life.
4. Water, energy and soil management.

Unit-III

1. Meaning, Objective, Importance and Philosophy of Environmental education.
2. Scope of environmental education—Multi-disciplinary approach correlation with other school subjects.
3. Environment Education as a subject, its curriculum at different levels.

Unit-IV

1. Methods and Approaches : Group discussion, project, problem solving, observation, field-trips/excursion, activity method, Games and simulation, puppet, lecture-demonstration, Ecology club, Ecology-laboratory, Library and publications.
2. Role of Mass-Media Films and Audio-Visual material in Environmental education.

Unit-V

1. Role of different agencies : UNEP, W.W.F. Friends of trees, N.G.O.s and Government organisations.

Sessional Work : 20 Marks

- (1) One test of-10 Marks
- (2) Any one of the following: (10 Marks)
Select one from each section :

Section-A (Each 5 Marks-10 Marks)

Any one of the following :

1. Prepare a scrap-book of an Environmental articles and news.
2. Preparation of maps or charts or models or Transparencies related to Environmental issues.
3. Study any Environment problem and write a report of the same.
4. Find out Environment friendly or degradable products and prepare a list.
5. Study the role of any local NGO.
6. Planning of an out of class activity/Games/simulation related to Environment.

Section-B

Prepare an article on any one of the following :

1. Concept of Eco-system and Interdependency.
2. Green house effect Global warming.
3. Depletion of Ozone Layer and Acid rain.
4. Acts related to conservation of Environment.

Bibliography :

1. Bedydo, M.L. : Global Ecology. Progress publishers, McGraw, 1980.
2. Clapham, W.B. : Natural Ecosystem: Macmillan and Co. London

3. Deshbandhu and G. Berberet : Environmental Education for conservation and Development Indian Environmental society, New Delhi.
4. Dubey and S. Singh : "Environmental Management" Geography Deptt. Allahabad University.
5. Garg, R.K. & Tatair Prakash, "Paryavaran Shiksha", Community Centre.
6. Holliman, J. : "Consumer's Guide to the Protection of the Environment", Ballanine London.
7. Laptex, J. : "The world of man in the world of nature", Progress publishers, Moscow.
8. Pal, B.P. : "National Policy on Environment", Deptt of Environment, Govt. of India, New Delhi.
9. Sharma, H.S. & Singh H.P. : "Environment Education Teaching" (Hindi), Radha Prakashan Mandir, Agra.
10. Sharma, R.A. : "Educational Environment", R.Lall Book Depot, Meerut.
11. Simmons, I.G. : "The Ecology and Natural Resources", Edward Arnold, London.
12. Unesco, "Trends in Environment Education", UNESCO, Paris, 1977.
13. Verma, V.A. : "Text-book of Plant Ecology", Emkary Publication, Delhi, 1972.
14. Vya, H. : "Paryavaran Shiksha", Vidya Vihar, New Delhi.

POPULATION EDUCATION

Objectives : Students will be able to :

1. Understand the Meaning, Scope and Importance of Population education.
2. Understand the Meaning, Factors and Impact of standard of life.
3. Understand the Need and Means of Population Control.
4. Understand the Role of different agencies in the Population Education.

Contents

Unit-I

Population Education : Meaning and definition, Scope, Need and Importance of Population Education, Role and purpose of Population Education as integral part of education

Population of India in a world perspective : Concept of population, Theories of population, Under Populations: Growth, Distribution and density of population, Over Population with demographic data of India in world perspective.

Unit-II

Standard of Living and the Quality of Life : Food and nutrition, health-hygiene, Sanitation; Housing, Clothing; Education travel, leisure, Employment, Income, Consumption levels; Efficiency and output, Social cultural and spiritual enlightenment; Ethics and aesthetics; Different aspect and their inter relationship with example and illustration from India and abroad, Population and India's Development Endeavor, population growth and production with special reference to National Income. The impact of development of family life on society, Culture and Personality.

Unit-III

Population Control and Planning : India's Population Policy, The role of society and the formation of public opinion favourable for Population Control, Role and responsibility of family and individual; A small family unit for healthier, happier and better homes, improved standard of living, better quality of life.

Population Equilibrium : Emergency and long measures role of Population Education.

Unit-IV

Emergence of Population Education : Action taken for Population Education (Historical Background), Introduction of Population Education in School; Colleges and teacher education institution, Role of Different Agencies and Organisation, Home, School, Community; Government (Population policies and programmed voluntary Agencies; Mass media.

Unit-V

Teacher of Population Education : His Preparation, qualities, Role of teacher education, Education Activities for Population Education; Extension lectures, Debates, Survey, games, Exhibitions, Dramas, Meeting with parents; Preparation of aids, etc.

Sessional Work (20 Marks)

- (1) One test of-10 Marks
- (2) Any one of the following: (10 Marks)
 1. Study the causes of population problem and write a report of the same.
 2. Write one essay on any topic of population.
 3. Write any two abstracts related to population education.

ELEMENTARY EDUCATION

Objective : Student-Teachers will be able :

1. To understand the concept, scope and objectives of elementary education.

2. To recall the constitutional provision and understand the efforts made by different agencies for the expansion of Elementary Education.
3. To understand the ideology and experiments of Mahatma Gandhi and Giju Bhai in the field of elementary education.
4. To understand the child and development of school-community relationship.
5. To use the teaching methods in the elementary school classrooms
6. To prepare and use teaching-learning material in the classrooms
7. To understand and use techniques of evaluation.
8. To understand and analyse the significant problems related to elementary education.

CONTENTS : THEORY

Unit-I

- (a) Elementary Education : Concept, Scope and Objectives.
- (b) Constitutional provisions and efforts made after independence

Unit-II

- (a) Status of UEE (Universalisation of Elementary Education) in Rajasthan.
- (b) Role of State, Local bodies and NGOs in the expansion of UEE.
- (c) Experiments and Schemes (DPEP, Gurumitra, Lok Jumbish, Shiksha Karmi, Sarswati Yojna, Sarva Shiksha Abhiyan, Rajeev Gandhi Pathshala, Para Teachers etc.)

Unit-III

- (a) Experiments in elementary education by Mahatma Gandhi and Giju Bhai.
- (b) Training, Service conditions and responsibilities of elementary school teachers.
- (c) Role of elementary school teacher in developing school-community relationship.

Unit-IV

- (a) Objectives and methods of teaching language, environmental studies Mathematics and SUPW.
- (b) Methods of Teaching : (i) Story telling (ii) Activity (iii) Play-way (iv) Multi-subject teaching
- (c) Continuous and Comprehensive evaluation

Unit-V

- (a) Problems in Elementary Education (Status, Causes and suggestions)
 - (i) Quality V/S Quantity
 - (ii) Dropouts

(iii) Disparity in enrolment of girls and groups based on Socio-economic states and categorise (ST/SC etc.)

(b) Administration and supervision of elementary schools.

Sessional Work : 20 Marks

(1) One test of-10 Marks

(2) Any one of the following: (10 Marks)

1. Observation of learning process (five periods of any one elementary class)
2. Preparation of instructional material on any topic/concept in any of the two subjects.
3. Planning, Organisation and Reporting of one play-way class.

Bibliography

1. Mohanty, J & Mohanty, B: Early Childhood care and Education. Deep & Deep Publications, New Delhi, 1964.
2. Rawat, D.S. & Others: Universalisations of Elementary Education : NCERT, New Delhi, 1981.
3. Mohanty, Jagmohan, "Primary and Elementary Educations" Deep & Deep Publications, Pvt. Ltd. F-159, Rajouri Garden, New Delhi-110027, Published in 2002.
4. कुलपति, निर्मला, बाल शिक्षण की आदर्श चार विधियाँ, जनवाणी प्रकाशन प्रा.लि. दिल्ली-110 032, संस्करण-2003.
5. Rao, R.K. "Primary Educations", Kalpar Publications Delhi-110052. Published in 2000.
6. Grewal, J.S. (Dr.) "Early Childhood Education National Psychological Corporations 4/230, Kacheri, Ghat, Agar-282004 (U.P.) India Printed in 1995.
7. बधेका, गिजुभाई, प्राथमिक विद्यालय की शिक्षा पद्धतियाँ, संस्कृति साहित्य, दिल्ली-110032, प्रकाशन वर्ष 2000.
8. Shukla, Chaya: "Teaching of Social Studies in Elementary School, Mohit National Publication-2002.
9. चौहान, आर.एस. बाल विकास के मनोवैज्ञानिक आधार, प्रकाशक, आगरा साहित्यिक, 2002.
10. बधेका, गिजुभाई, गिजुभाई ग्रंथमाला मोन्टेसरी बाल शिक्षण समिति, राजलदेसर (चूरू) प्रकाशन वर्ष 1998.
11. National Policy on Education 1986. Programme of Action 1992. (New Delhi : MHRD. 1992 a)
12. National Policy on Education 1986 (Programme of Action 1992). New Delhi : MHRD. 1992 b)
13. Report of the Committee of State Education Ministers on Implications of Proposal to make Elementary Educations a

- Fundamental Right (New Delhi. Department of Education) (1997).
14. Sinha. Amarjeet. **Primary Schooling in India.** (New Delhi : Vikas) 1998
 15. **Elementary Education in the 1990s, Problems and Perspectives** Mimeo NIEPA A. New Delhi (1994).
 16. **Public Report on Basic Education in India.** Oxford University Press. (1998).

PHYSICAL EDUCATION

Objectives to develop :

1. Understanding of the aims and objectives of Physical Education
2. The ability to organise and administer Physical Education Programme in Sec. Schools
3. The Student teachers for teaching Physical Education.
4. Acquaintance with the physiological principles of body building and with the biological and psychological characteristics of secondary school students.
5. The ability to evaluate the Physical Education programme

Contents : Theory

Unit-I

Modern concept of Physical Education. its relation to education. its place in schools. Aims and Objectives of Physical Education. Olympic games & their place in India. Physical Education in democracy : its Social, Economic and Political implications

Unit-II

Psychological foundation of Physical Education. Age characteristics, need & interest of secondary school children. activities to meet their needs. Programmes of Physical activities for a school.

Unit-III

Organisation and administration of tournaments, intra-murals, extra murals, excursions, play days, play centers, Athletic meet. Marking of standard Track (400 M) (imitation method, demonstration method, whole part whole method, discussion method and lecture method).

Unit-IV

Biological foundation of Physical Education. Physical and medical checkup. Corrective remedial exercises, first aid, yoga, fatigue.

Unit-V

Rules of major games & sports. Making of grounds. Main points of coaching in different games Via Football, Volleyball, Hockey, Cricket, Kho-Kho, Kabaddi, Basketball, Badminton and Athletics

Practical and Sessional Works : 20 Marks

- (1) One test of-10 Marks
- (2) Any one of the following : (10 Marks)
 1. Pupil teachers will be required to perform and show proficiency in atleast three activities which include marching as one. out of the following :
One major game. Two minor games. Marching, Athletics, Yogasan
 2. Prepare teaching aids-any two from the following (1) Charts (2) Diagram (3) Model.
 3. Report of physical Education programmes of a Sec/Sr. Sec. School.

Books Recommended :

1. National Plan of Physical Education and Recreation (Ministry of Education, Govt. of India).
2. Thomas, J.P. : Organisation of Physical Education Madras Y.M.C.A.
3. Williams, J.F. : Principles of Education. —
4. Sharma, J.R. : Principles of Physical Education. —
5. Tirunaryan, O and Harisharan, S. : Methods in Physical Education. (A.C.P.E. Karakaikudi-4)
6. Rice, E.A. : A Brief History of Physical Education.
7. Weight Training in Throwing Events—Viodya Sagar Sharma (NIS Edition).
8. Dr. R.I. Anand : Playing Field Manual (NIS Edition)
9. लायल, शारीरिक शिक्षा (शकुन्तला प्रकाशन, लखनऊ)
10. मोहन, वी.एम.ए. : शारीरिक शिक्षा के सिद्धांत एवं तत्त्व ज्ञान (केट्रोपोलिटन बुक कम्पनी, दिल्ली)
11. Syllabus of Exercise for Primary, Upper Primary and Secondary Schools. Education Department, Govt. of Rajasthan.
12. हरीकिशन शर्मा : विद्यालयीन शारीरिक शिक्षा एवं खेल संचालन, प्रशासन एवं पर्यवेक्षण (पण्डित प्रकाशन, 1933, बैरवाड़ा, नई दिल्ली)।
13. Y.M.C.A. Madras : Rules of Games and Sports.
14. B.D. Bhatt and S.R., Sharma : Teaching of Physical and Health Education. Kanishka Publishing House. 9/2325. Street No. 12. Kailash Nagar. Delhi-110 003.
15. डॉ. जी.पी. शैरी : स्वास्थ्य शिक्षा, विनोद पुस्तक मंदिर, आगरा।



14 ART (Methodology)

Objectives :

The students teacher will be able to :

- (i) Understand the important concepts used in the discipline.
- (ii) To prepare unit plan, lesson plans for different classes.
- (iii) Critically evaluate existing school syllabus and text books.
- (iv) Prepare achievement test and diagnostic tests, administer them and analyse the results.
- (v) Prepare suitable teaching aids and use them in the class-room effectively.

SYLLABUS

1. Principles of Class room teaching.
2. The aims and values of Teaching Art.
3. The place of Art in General Education
The Educational value of Art and its relation with other school subject.
4. The important of creative activity in Elementary Education.
5. Different stages of development and artistic expression.
 - A. Beginning of self-expression.
 - B. First representational attempts.
 - C. The achievement of form concept.
 - D. The Daurining realism.
6. Qualities of Art teacher :
7. Teaching of Art at different stages of development from nursery to high school. Its curriculum and new concept of Art Education.
8. Visual aids in teaching art, the black-board, art object and reproduction photographs and other aids.
9. Educational values of Exhibitions, Art Galleries and Museums.
10. Art in Basic School.

12. Art and International understanding.

SESSIONAL WORK – 20 MARKS

1. Ont Test of 10 Marks

2. Any one of the following 10 marks :

(i) Content analysis and preparation of instructional material related to any unit of subject related to Arts.

(ii) Preparation of a plan for equipping an Arts Lab.

(iii) Writing of an Essay on any topic based on the contents of the above units.

(iv) Visit of any Art Gallery/Exhibition.

(v) Life sketch and contribution of one artist.

Recommended Books :

- | | |
|---|---|
| 1. कला शिक्षा शिक्षण | यशवन्ती गौड़ |
| 2. कला शिक्षण | कुसुम शर्मा |
| 3. शिक्षण कला | एस.एस. माथुर |
| 4. कला शिक्षा शिक्षण | दीप्ति पाण्ड्या, भगवती अहीर, राकेश भट्ट |
| 5. कला शिक्षा एवं कार्यानुभव
शिक्षा शिक्षण (दक्षताएँ, विषयवस्तु
एवं शिक्षण विधियाँ) | डॉ. एम.एम. शर्मा, श्रीमती सरोज रॉय
महेन्द्रा भाटी, रितु बाला |

15. MUSIC

Objectives :

The Student will be able to :

- Understand the important concepts used in the discipline.
- To prepare unit plans and lesson plans for different classes.
- Critically evaluate existing school syllabus and text books.
- Prepare achievement test and diagonostic tests, administer them and analysis the results.
- Prepare suitable teaching aids and use them in the class room effectively.